

Norman Bird

The Distribution of Indo-European Root Morphemes

(A Checklist for Philologists)

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OTTO HARRASSOWITZ · WIESBADEN

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INTRODUCTION

The purpose of this study of Julius Pokorny's Indo-European Etymological Dictionary¹ is to reproduce in a handy form what Pokorny implies to be the corpus of root morphemes of Indo-European origin and to comment on these implications from a predominantly statistical point of view.

This compact checklist should enable linguists to check Pokorny's findings, correct and complete them as necessary, and so help produce a more accurate and comprehensive linguistic tool for the future.

Pokorny's dictionary is nowadays frequently dismissed as little more than a re-working of A. Walde and J. Pokorny's earlier dictionary² with Hittite, and some new Tocharian additions, the stage reached in linguistic scholarship half a century ago, and therefore simply out of date.

While respecting these opinions I believe that Pokorny's dictionary, and this study of it, still have an important role to play in linguistic research. The following three reasons may usefully be considered:

1. J. Pokorny's dictionary is the most recent attempt to provide a comprehensive summary on the subject, and, however dated, it is still frequently used at least as a starting point by students in the field.
2. Hitherto the contents of the dictionary have remained in German, thus creating something of a barrier for non-German-speaking students of Indo-European philology. This much shortened list in English should do something to extend the available information to a wider readership.
3. The statistical material which forms the main body of the work is new, and furthermore its presentation demonstrates a method which can usefully be applied to any new dictionary on the subject when it appears.

THE THREE TABLES

The main body of this work consists of just three tables and these are described in detail below.

- 1) J. Pokorny 'Indogermanisches Etymologisches Wörterbuch' Franke (Bern and Munich) Vol I 1959, Vol II The Index compiled by H.B. Partridge 1969.
- 2) A. Walde 'Vergleichendes Wörterbuch der Indogermanischen Sprachen', edited and revised by J. Pokorny, 3 Vols. DeGruyter (Berlin and Leipzig) 1927-32.

TABLE ONE comprises:

1. a complete list of Indo-European root morphemes in alphabetical order,
2. an indication of their area of meanings,
3. their distribution throughout the fourteen Indo-European language groups.

This is illustrated in figure 1.

(a)	(b)	(c)	(d)	(e)	(f)
1296	23	nēik-	to assail	x x x x 5 x x x ?	10 11 12 x x 4

Figure 1. A typical entry in Table One

The meaning of the six sections in each entry is as follows:

- a) e.g. 1296: the overall serial number of this entry within Pokorny's dictionary which contains 2044 relevant entries in all.
- b) e.g. 23: the serial number of this entry within its alphabetical section, i.e. the example indicates that 'nēik-' is the 23rd entry with initial 'n'.
- c) e.g. nēik- : the first starred headform appearing in Pokorny.
- d) e.g. to assail: one of the probable meanings of the starred form.³
- f) e.g. 1 2 3 4 5 6 7 8 9 10 11 12 13 14
5 ? 10 11 12

The Indo-European groups in which derivatives of the starred form occur.

The numbers at the head of each page in Table One indicate the fourteen groups of Indo-European origin in the order in which they occur in Pokorny, which is as follows:

- | | |
|------------------------|----------------------------|
| 1. Indic | 8. Italic (or Romance) |
| 2. Iranian | 9. Celtic |
| 3. Armenian | 10. Germanic |
| 4. Phrygian and Dacian | 11. Baltic |
| 5. Greek (or Hellenic) | 12. Slavonic (or Slavic) |
| 6. Illyrian | 13. Tocharian |
| 7. Albanian | 14. Hittite (or Anatolian) |

For the complete list of the components of each of these groups, see Pokorny II pages 493-495.

As one of the purposes of this work is to supplement Pokorny, no attempt has been made to discuss the validity of dividing the Indo-European languages into these fourteen particular groupings, e.g. the grouping of Armenian with Phrygian and Dacian under one heading

3) As in note (c), in the interests of economy, only one meaning has been translated from the original German, and no attempt has been made to indicate the whole suggested semantic area of the original.

'Thraco-Phrygian' or a similar inclusion of Albanian but exclusion of Venetic under 'Illyrian' as in Lockwood.⁴

Likewise no attempt has been made to list the languages in a different and perhaps more interesting or revealing order, e.g. on a purely geographical basis from West to East depending on the approximate centre of the language homeland, as follows:

- | | |
|----------------------------|-------------------|
| 1. Celtic 6W | 8. Baltic 24E |
| 2. Germanic 10E | 9. Slavonic 27E |
| 3. Italic 12E | 10. Hittite 32E |
| 4. Illyrian 13E | 11. Armenian 45E |
| 5. Albanian 20E | 12. Iranian 52E |
| 6. Hellenic 23E | 13. Indic 78E |
| 7. Phrygian and Dacian 24E | 14. Tocharian 85E |

In figure 1, therefore, the numbers 5, 10, 11, 12, indicate that derivatives of 'nēik-' occur in Hellenic, Germanic, Baltic and Slavonic. The question mark under '9' indicates that there exists a possible but doubtful derivative to be found in Celtic, but that this has been ignored in considering the size of the set.

f) e.g. 4: the size of the set, i.e. there are four occurrences in the entry 'neik- = to assail', namely 5, 10, 11, 12.

It is self-evident that the size of a set subsumes various patterns within the set, e.g. 1,2,3,4; 2,5,8,14; 5,10,11,12 etc.

TABLE TWO contains:

1. a complete list of the sets of occurrences listed in a logical sequence according to the patterns established by their elements,
2. the number of patterns of the same kind within each set,
3. the elements constituting these patterns according to their serial numbers; see section 1 of the explanations of Table One.

If we consider once again our example: '1296-23 - nēik- = to assail', we see that it contains four items, namely 5, 10, 11 and 12 (the code numbers for Hellenic, Germanic, Baltic and Slavonic).

In Table Two this example will be found in the section 'Sets of 4 Occurrences', viz.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	Number	Items
x	x	x	x	5	x	x	x	x	10	11	12	x	x	15	246, 459, 560, 657, 822, 864, 948, 956, 985, 1205, <u>1296</u> , 1389, 1476, 1751, 1758

The maximum number of combinations (or patterns) possible with fourteen elements is 16,384.

4) W.B. Lockwood 'A Panorama of Indo-European Languages (Hutchinson) London 1972.

This is calculated by use of the standard statistical formula:

$$nCr = \frac{nPr}{r^1} .$$

This formula is demonstrated further in figure 2.

1 2 3 4 5 6 7 8 9 10 11 12 13 14	Number of ways (patterns or sets) of filling the boxes	Total
(14 boxes to fill)		
With 0 (or 14)	1	1
With 1 (or 13)	14	14
With 2 (or 12)	<u>14 x 13</u> 2 x 1	91
With 3 (or 11)	<u>14 x 13 x 12</u> 3 x 2 x 1	364
With 4 (or 10)	<u>14 x 13 x 12 x 11</u> 4 x 3 x 2 x 1	1001
With 5 (or 9)	<u>14 x 13 x 12 x 11 x 10</u> 5 x 4 x 3 x 2 x 1	2002
With 6 (or 8)	<u>14 x 13 x 12 x 11 x 10 x 9</u> 6 x 5 x 4 x 3 x 2 x 1	3003
With 7	<u>14 x 13 x 12 x 11 x 10 x 9 x 8</u> 7 x 6 x 5 x 4 x 3 x 2 x 1	3432
With 8		3003
With 9		2002
With 10		1001
With 11		364
With 12		91
With 13		14
With 14		<u>1</u>
	Grand Total	16,384

Figure 2

As only 2044 items (i.e. the total number of entries in Pokorny) are under consideration in this study, the probability of the same combination (way, pattern, set) occurring twice by chance is $\frac{2044}{16,384}$ or approximately 8 to 1.

The chances of the same combination occurring 15 times by chance is obviously less than 8 to 1, in fact it is so small as to be infinitesimal. The fact that it does actually occur should, therefore, be of linguistic significance. As this study is concerned, however, with what Pokorny states, and as a consequence implies, little or no attempt has been made to interpret the findings.

In passing, however, it should be noted that, as illustrated by the following list, the largest number of patterns of the same type occur in those sets which contain on the whole the smallest number of items (or elements):

<u>Occurrences in the set</u>	<u>Pattern</u>	<u>Largest No. of patterns of the same type in a set</u>
14	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1
13	1 2 3 x 5 6 7 8 9 10 11 12 13 14	4
12	1 2 3 x 5 x 7 8 9 10 11 12 13 14	9
11	1 2 3 x 5 x 7 8 9 10 11 12 13 x	12
10	1 2 3 x 5 x 7 8 9 10 11 12 x x	12
9	1 2 3 x 5 x x 8 9 10 11 12 x x	18
8	1 2 x x 5 x x 8 9 10 11 12 x x	22
7	1 x x x 5 x x 8 9 10 11 12 x x	18
6	x x x x 5 x x 8 9 10 11 12 x x	10
5	x x x x 5 x x x 9 10 11 12 x x	12
4	x x x x x x x x 9 10 11 12 x x	20
3	x x x x x x x x x 10 11 12 x x	35
2	x x x x x x x x x 10 11 x x x	44
1	x x x x x x x x x 10 x x x x	14

Total 8 7 6 1 10 2 5 9 11 14 13 12 4 3 = No. of occurrences
of each language

Frequency 7 8 9 14 5 13 10 6 4 1 2 3 11 12 = Rank of each language

The pattern which emerges from this list bears a close, but not an exact, relationship to the following series of languages in groups listed in descending order according to the number of actual entries compared with the maximum possible number of entries which as stated above is 2044.

<u>Serial No. or Rank</u>	<u>Name of Language Group and Code No.</u>	<u>Entries out of 2044</u>		<u>Rank in the above list</u>
		<u>No.</u>	<u>%</u>	
1	Germanic (10)	1377	67.368	1
2	Hellenic (5)	1235	60.420	5*
3	Baltic (11)	1098	53.718	2*
4	Indic (1)	1008	49.315	7*
5	Italic (8)	959	46.918	6*
6	Slavonic (12)	941	46.037	3*
7	Celtic (9)	920	45.010	4*
8	Iranian (2)	682	33.366	8
9	Armenian (3)	472	23.092	9
10	Albanian (7)	325	15.900	10
11	Tocharian (13)	260	12.720	11

<u>Serial No. or Rank</u>	<u>Name of Language Group and Code No.</u>	<u>Entries out of 2044</u>		<u>Rank in the above list</u>
		<u>No.</u>	<u>%</u>	
12	Hittite (14)	155	7.583	12
13	Illyrian (6)	116	5.675	13
14	Phrygian and Dacian (4)	81	3.963	14

Note: *indicates that the ranks in the two lists are different.

TABLE THREE is concerned exclusively with the proportional relationship of each of the fourteen language groups to each other.

This relationship is expressed in three ways as described below:

1. in terms of the actual number of times any two particular language groups co-occur in proportion to their individual total number of occurrences, e.g.1.: Indic (1) co-occurs with Iranian (2) 577 times out of a total number of 682 occurrences in Iranian.
e.g.2.: Iranian (2) co-occurs with Indic (1) 577 times out of a total number of 1008 occurrences in Indic.
2. in terms of a rounded percentage:
e.g.1.: Indic co-occurs with Iranian $\frac{577 \times 100}{682} = 85\%$
of the times that Iranian occurs.
e.g.2.: Iranian co-occurs with Indic $\frac{577 \times 100}{1008} = 57\%$
of the times that Indic occurs.
3. in terms of the correlation to a universal base figure of '1' calculated to two rounded decimal places as follows:

$$\begin{array}{r} \text{e.g. } \frac{577 \times 1000}{1008} + \frac{577 \times 1000}{682} \\ \hline = 1 : .71 \\ 2000 \end{array}$$

It is hoped that these calculations will be of value within the fields of lexicostatistics and glottochronology in which hitherto there has been a tendency to base theories on a small number of basic cultural words rather than, as has been implied here, on a larger number of root morphemes.

FINAL REMARKS AND CONCLUSIONS

As has already been stated above, the purpose of this work is neither to draw conclusions nor develop theories, but to provide a handy tool in the form of a checklist in order to simplify the work of a wide range of linguists working in different fields of research. Nevertheless it is inevitable that in compiling this piece of research on Pokorny's dictionary, certain points have arisen which are worthy of further consideration.

The largest number of entries in Pokorny's dictionary is to be found under Germanic, probably one of the most thoroughly researched groups of

the Indo-European languages. One may assume, therefore, that the figure of 1377 root morphemes of native origin approaches the total number of root morphemes in the original Indo-European language. If we assume the existence of a total number of approximately 1500 root morphemes in Indo-European, then Pokorny's figure of 2044 is approximately 544 too large. The question then arises as to which root morphemes, if any, are either of non-Indo-European origin or have been included in the dictionary under two or more distinct entries, when they could in fact have been grouped under a single entry. The following table gives a clue, but by no means a conclusive one, as to which these might be.

<u>Number of Occurrences per Set</u>		<u>Total Number of Occurrences of the Set</u>		<u>Total Number of Items Occurring in Sets of this Type</u>	<u>Total Cumulative Number of Occurrences</u>
14	x	1	=	14	1
13	x	8	=	104	9
12	x	28	=	336	37
11	x	36	=	396	73
10	x	76	=	760	149
9	x	85	=	765	234
8	x	112	=	896	346
7	x	146	=	1022	492
6	x	151	=	906	643
5	x	221	=	1105	864
4	x	297	=	1188	1161
3	x	407	=	1221	1568
2	x	440	=	880	2008
1	x	36	=	36	2044
Total Number of Entries			=	9629	

It seems reasonable to suppose that the more elements that a set contains, then the more likely it is to be a true Indo-European root morpheme, and vice versa. This brings those sets of 1, 2 and even some of those containing 3 elements into considerable doubt as to their validity. Pokorny himself indicates his doubts on several occasions by means of cross references, and thus points the way to further research towards the discovery of the true repertoire of Indo-European root morphemes. Furthermore it is also self-evident that, if those sets which contain only a small number of elements are either eliminated as non-Indo-European or are included in other larger sets, then Tables One and Two in this work will have to be revised, and the calculations in Table Three must undergo radical change. It is for this reason that

more advanced calculations have not been included, e.g. the proportional relationship of pairs of language groups to a third language group etc. This work, interesting in itself, gains significance only after the establishment of a generally accepted list of root morphemes.

The definitive dictionary on the subject has yet to be produced, and in view of the area of ignorance in the field which still exists, one can but hope that, when finally concluded, it will, unlike Pokorny's work, contain:

1. no variations in the starred headforms,
2. no doubts as to whether a particular entry constitutes a root morpheme in its own right or whether it should be entered as a subsection of another starred headform.

If this study can be of value, however small, to linguists already working in the field, and if it stimulates others into looking more deeply into the question of what constituted the language, life and culture of the ancestors of a very large proportion of the world's population, the author will feel that his efforts have been amply rewarded.

T A B L E O N E

The Indo-European Roots and Their Distribution

Ǟ - Ǟi - Ǟu

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1-1	Ǟ (exclamation)	1				5			8		10	11				5
2-2	ab- water + 89						6		8	9	10	11				5
3-3	Ǟbel- apple								8	9	10	11	12			5
4-4	abh- swift + 5		?			5							12			2
5-5	abhro- strong + 5					4	6			9	10					4
x	abō(n) monkey (new form)															
6-6	1. ad- to, by, at + 7	1			4				8	9	10					5
7-7	2. ad- to fix + 6								8	9	10					3
8-8	ades- type of grain								8		10			13		3
9-9	ad(u) water course		2				6					11				3
10-10	aġ- to drive	1	2	3		5			8	9	10	11	12	13		10
11-11	Ǟġ- he-goat + 28	1	2					7				11	12			5
12-12	aġh- pregnant animal	1	2	3						9						4
13-13	Ǟġher- day	1	2								10					3
14-14	agh- to be depressed + 15					5				9	10					3
15-15	agh-(lo)- unpleasant + 14	?								?	10					1
16-16	aghl(u) dark cloud				3	5						11				3
17-17	agos- blemish	1				5					10					3
18-18	agro- tip	1	2						?			11			?	3
x	agro-s + 10															
19-19	agu(e)si axe					5			8		10					3
20-20	ag ^u h-no-s lamb					5			8	9	10		12			5
21-21	1. ai (exclamation) + 35	1	2			5						11				4
22-22	2. ai- to close in	1	2			5			?							3
23-23	3. ai- to give		2			5	6		8	9				13	14	7
24-24	4. Ǟi- to burn + 26, 27, 36, 40, 41						?				10					1
25-25	5. ai- significant talk?					5			9	?						2
x	aid- to swell + 1328															
26-26	ai-dh- to burn + 24 etc	1	2		4	5		7	8	9	10	11	12			10
27-27	Ǟi ^u er- day(light) + 24		2			5					10					3
28-28	aiġ- goat + 11			2	3	5										3
29-29	1. aig- out of humour								7	8		10	11	12	13	6
30-30	2. aig- oak					5			?		10					2
31-31	3. aig- to move violently	1				5					10		12			4
32-32	aig ^u h- to be ashamed					5					10					2
33-33	ā(i)ġh- to need	1	2			5								13		4
34-34	Ǟi ^u k- spear		2			5			8	?		11	12			5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
35-35	aik- to call to? + 21					5						11				2
36-36	a _i os- metal + 24	1	2						8		10					4
37-37	ai-rā type of grass	1				5						11				3
38-38	1. ais- to wish	1	2	3					8		10	11	12			7
39-39	2. ais- to respect	1				5			8		10					4
40-40	aisk- clear, bright + 24						?			?	10	11	12			3
41-41	ai-tro- bitter? + 24											11	12			2
42-42	aiu- life force	1	2			5		7	8		10			13		7
43-43	1. a _k - to eat	1	2			5					10					4
44-44	2. a _k - sharp + 1330, 1331	1	2	3		5	6	7	8	9	10	11	12	13		12
45-45	akkā mummy	1				5			8							3
46-46	ak _r ru tear + 299	1	2									11		13		4
47-47	ak _u - to damage?	1	2			5										3
48-48	ak _u - water	?					6		8	?	10		12	13	14	6
49-49	1. al- beyond + 108	1	2	3		5			8	9	10		12	13		9
50-50	2. al- to grow, make	1	2		?	5			8	9	10			13		7
51-51	3. āl- to wander about					5			8			11		13		4
52-52	4. al- to burn	1				?			8	?	10					3
53-53	5. al- to grind	1	2	3		5										4
x	6. al- + 56															
54-54	alā hello + 445, 1045	1				5						11	12			4
55-55	albhi- barley + 56			?		5		7								2
56-56	albho- white + 55, 445, 447, 1922				3	5			8	9	10	11	12		?	7
57-57	aldh- trough										10	11	12			3
58-58	aleq- to ward off + 104 106	1		3		5					10	11		13		6
59-59	algh- frost								8		10					2
60-60	alg _u h- to gain, earn	1	2			5						11				4
61-61	alp- small, weak?	1				?		?				?				1
62-62	ālu- bitter plant?	1				5			8							3
63-63	alu- bitter, beer					5			8		10					3
64-64	ambhi around, both +423, 473 (= 72+232?)	1	2	3		5		7	8	9	10	11	12	13		11
65-65	1. am- to seize + 1164	1		3					?							2
x	2. am- + 1165															
66-66	āmer- day			3		5										2
67-67	ames- blackbird								8	9	10					3
x	am + 1336															
68-68	am(m)a mummy					?		7	8		10			13		4

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
69-69	1. an- relatives (both male and female)			3		5	6		8	9	10	11			14	8
70-70	2. an- other(side), there	1	2			5			8	9	10	11	12			8
71-71	3. an(ə)- to breathe + 85, 87		1	2	3	5		7	8	9	10		12	13		10
72-72	4. an over there, along	1	2	3		5			8	?	10	11	12			8
73-73	andh- to sprout	1	2	3		5		7	9	10	?			13		8
74-74	andho blind, dark	1	2						9							3
75-75	anət- duck + 506	1				5			8		10	11	12			6
76-76	anəta doorpost	1	2	3					8		10					5
77-77	anḡh- narrow + 134, 2028	1	2	3		5			8	9	10	11	12	?		9
78-78	anḡhen- scent, smell			3							10					2
79-79	ang ^u (h)i snake + 431	1	2	3		5	6		8	9	10	11	12			10
80-80	1. ank- force + 1297					5			9	?					?	2
81-81	2. ank- to bend	1	2	3		5			8	9	10	11	12	13		10
82-82	āno- ring			3					8	9						3
83-83	ans- well inclined					5					10					2
84-84	ansā noose, bow					5			8	9	10	11				5
85-85	ansu- spirit, demon + 71	1	2				6		8		10					5
86-86	ant-s front, brow	1		3		5			8	9	10	11		13	14	9
87-87	antro-m hollow, cave + 71			3		5										2
88-88	1. ap- to grasp	1	2	3		5			8					13	14	7
89-89	2. āp- water + 1990	1	2		4	5	6					11				6
90-90	3. ap- fragile, harm	1	2			5						11				4
91-91	appa daddy + 1364					5								13		2
92-92	apelo- strength					5	6		9	10						4
93-93	āpero- bank (of river)					5				10						2
94-94	apo- off, away + 1454	1	2	3	4	5		7	8		10	11	12		?	10
95-95	apsā aspen tree										10	11	12			3
96-96	1. ar- to fit, suit	1	2	3		5			8	9	10	11	12	13	?	10
97-97	2. ar- to share			2	3		5								14	4
98-98	3. ar- nut					5		7				11	12			4
99-99	4. ar- now, therefore					5						11		13		3
100-100	5. ar- to renounce + 1345			?		5		7								2
101-101	ar(ə)- to plough + 107			3		5			8	9	10	11	12	13		8
102-102	ardh- stake? + 481			3								11				2
103-103	ardi- tip, sting	1				5			9	10						4
104-104	areg- to shut away + 58	1			4	5				10						4
105-105	ar(e)ḡ- glittering + 496	1	2	3	4	5	?		8	9	?	?		13		8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
106-106	areq- to protect + 58			3		5			8	9	10	11	?		14	7
107-107	arenko- type of grain?															
	+ 101					5			?	9						2
108-108	ario-? Lord, host + 49	1	2							9	?					3
109-109	arqu- something bent					5			8		10	11	12			5
110-110	arōd- water bird					5			8		10		12			4
111-111	aro-m reed? (loanword?)					5			8							2
112-112	arūā- intestines?					5			8							2
113-113	ās- to burn, glow	1		3		5			8	?	10		12	13	14	8
x	ast(h)- + 1351															
114-114	at- to go, year	1							8	?						2
115-115	āt(e)r fire + 508		2	3				?	?			?				2
116-116	*ati- name of fish?					5			8	?		11				3
117-117	ati beyond	1	2	?		5	6	7	8	9	10	11	12			10
118-118	ātos mummy, daddy	1	2			5		7	8		10		12		14	8
119-119	1. au exclamation of pain	1							8		10	11	12			5
120-120	2. au- to stay overnight															
	sleep + 2012				3		5				10					3
121-121	3. au- down, away from	1	2			5	6	?	8	9	10	11	12		14	10
122-122	4. au- that, other	1	2			5		7	8	9	10	11	12	13		10
123-123	5. au- to plait, weave															
	+ 1926, 1941, 1944,															
	1952, 1953, 1956, 1959,															
	1962, 1966, 1968, 1969,															
	1988, 1989, 2017, 2034	1		3		6				9	10	11	12			7
124-124	6. au- to speak	1				5						11	12	13		5
125-125	7. au- to like	1	2	3		5			8	9	10	11		13		9
126-126	8. au- to be aware of	1	2			5			8				12	13	14	7
127-127	9. au- to sprinkle	1	2	3	4	5		7	8	9	10	11	12	13	14	13
128-128	10. au(ə)- to blow	1	2			5			8	9	10	11	12	13	14	10
129-129	11. auē- to strain	1				5			9					13		4
130-130	auēg- to increase	1	2			5			8	9	10	11		13		8
131-131	auēi- bird + 1353	1	2	3		5		7	8	9						7
132-132	auēs- to shine + 514, 2020	1	2			5			8	9	10	11	12			8
133-133	aug- to glitter					5		7					?			2
134-134	augh- nape of the neck +77	1	3			5										3
135-135	auīg- type of grass, oats								8			11	12			3
136-136	auq ^u (h)- cooking pot	1				5		7	8	9	10					6
137-137	au-lo-s pipe, conduit			3		5			8		10	11	12			6
138-138	auo-s maternal grandfather	?		?					8	9	10	11	12		?	5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
139-139	aus- to draw, scoop					5			8		10					3

Totals for $\check{\text{A}} - \check{\text{A}}_i - \check{\text{A}}_u - 139$

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	74	56	42	8	98	14	20	74	51	83	61	48	34	13=676
% of 139	53	40	30	6	71	10	14	53	37	60	44	35	24	9
Rank	3-	6	9	14	1	12	11	3-	7	2	5	8	10	13

B

[illegible]

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
164-25	brangh- hoarse?					5				9						2
165-26	breuq- to jump					5							12			2
166-27	bronk- to shut in										10	11				2
167-28	bu- lip, kiss		2					7		9	10	11	12			6

Totals for B - 28

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	12	4	6	1	17	1	6	13	10	14	12	13	0	0	=109
% of 28	43	14	21	4	61	4	21	46	36	50	43	46	0	0	
Rank	5-	10	8-	11-	1	11-	8-	3-	7	2	5-	3-	13-	13-	

Bh

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
168-1	1. bhā- to glisten + 181	1	2	3		5		7		9	10		12	13		9
169-2	2. bhā- to speak	1	?	3		5			8		10		12	13		7
170-3	bhabhā bean					5		7	8		10	11	12			6
171-4	bhād- good		1	2							10					3
172-5	1. bhag- to apportion		1	2		4	5						12	13		6
173-6	2. bhag- sharp + 266					3	5									2
x	bhagh + 262															
174-7	bhāgós beech tree			?		5			8	9	10		?			4
175-8	bhāghús elbow, forearm	1	2			5					10			13		5
176-9	bhar- something jutting out + 177, 179		1						7	8	9	10	11	12		7
177-10	bhardhā beard +176									8		10	11	12		4
178-11	bharek ^u - to stuff full					5			8	9				13		4
179-12	bhares- barley + 176								8		10		12			3
180-13	bhasco- bond, bundle					4	?		8	9						3
181-14	bhāso- one of the larger birds of prey + 168		1			5										2
182-15	bhāt- to hit + 183								8	9	10		12			4
183-16	1. bhāu- to hit + 182								7	8	9	10				4
x	2. bhāu + 168															
184-17	1. b(h)e beside, outside 1									?		11	12			3
185-18	2. b(h)ě emphatic particle ?23										10	11	12			5
186-19	bhē- to warm, roast					5	6				10		?			3
x	bhebhru +216															
187-20	1. bhedh- to stab, dig					?			8	9	10	11	12	13	?	6
188-21	2. bhedh- to crook, bend 1								7		10	11		13		5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
189-22	bheg- to smash + 261	1		3	?					9	?	11	12			5	
190-23	bhēgh- to dispute									9	10	11	12	?		4	
191-24	bheg ^u - to run away	1				5						11	12	13		5	
192-25	bhei- bee									9	10	11	12			4	
193-26	bheid- to split + 195	1				5			8	10						4	
194-27	1. bheidh- to encourage					5		7	8	10			12			5	
x	2. bheidh- + 238																
195-28	bhei(ə)- to hit + 193		2	3		5	6		8	9	10		12			8	
196-29	bheig ^u - to glitter?		2			5										2	
197-30	1. bhel- glittering white + 198, 205, 249, 250, 252, 254, 255		1		3		5	6	7	8	9	10	11	12	?	10	
198-31	2. bhel- henbane + 197							?			9	10		12		3	
199-32	3. bhel- to blow up + 246, 251		1	2	3	4	5			8	9	10				8	
200-33	4. bhel- leaf, bloom						5			8	9	10			13	5	
201-34	5. bhel- beam		1				5			8	9	10	11	12		7	
202-35	6. bhel- to resound + 141	1									10	11			13	4	
203-36	bh(e)lāg- slack, silly?													12		1	
204-37	bheld- to poke, hit										10	11				2	
205-38	bheleg- to glisten + 197	1					5			8	9	10	11	12	13	8	
206-39	bheleu- to hit, weaken + 253, 256										9	10		12		3	
207-40	bhelgh- to swell		1	2						9	10	11	12			6	
208-41	bhen- to hit, wound			2						9	10					3	
209-42	bhend- to sing, rejoice		1							9						2	
210-43	bhendh- to tie, bind		1	2		4	5		7	8	9	10	11			9	
211-44	bhengh- thick, dense		1	2			5		?		10	11			13	14	7
212-45	1. bher- to carry, bring + 276, 277, 278, 284		1	2	3	4	5	6	7	8	9	10	11	12	13	?	13
213-46	2. bher- to well up + 227, 270			1	2		4	5	6	7	8	9	10				9
214-47	3. bher- to work with a sharp tool + 275, 283, 285, 287, 289			1	2	3	?	5		7	8	9	10	11	12		10
215-48	4. bher- to hum, buzz + 220, 225			1		3		5					11	12			5
216-49	5. bher- glittering, bright brown + 221, 223		1	2			5			8	9	10	11	12	13		9
217-50	6. bher- to roast, bake		1	2			5	?		8			11				5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
218-51	7. bher- to plait, weave					5						11				2
219-52	bheredh- to cut	1				?					10					2
220-53	bhereg- to drone, bark + 215, 225					5		8			10	11	12			5
221-54	bherəḡ- to glitter, white, birch tree + 216	1	2		4			7			10	11	12			7
222-55	bhereḡh- high, noble + 228	1	2	3	4		6	8	9	10			12	13	14	11
223-56	bherəḡ- to glitter + 216	1				5				?	10				14	4
224-57	1. bherem- to stand out								8		10					2
225-58	2. bherem- to buzz, hum + 215, 220		1			5			8	9	10	11	12			7
226-59	bheres- quick							?	8	9		11	12			4
227-60	bh(e)reu- to surge + 213, 270		1		3	4	5		7	8	9	10	11	12		10
228-61	bherḡh- to hide + 222										?	10	11	12		3
229-62	bherug- throat				3		5		8		10	11				5
230-63	1. bhes- to rub off + 267	1				5		7	8		10			13		6
231-64	2. bhes- to breathe + 1403, 1426, 1433		1			5										2
232-65	bheu- to grow, prosper	1	2	3	4	5	6	7	8	9	10	11	12	?		12
233-66	bheudh to awaken,		1	2		5				9	10	11	12	13		8
234-67	1. bheug- to flee					5	?	8				11				3
235-68	2. bheug- to put away		1	2			6				10					4
236-69	3. bheug- to bend		1					?		9	10	11				4
237-70	4. bheug- to enjoy		1					7	8							3
238-71	bhidh- pot, vat					5			8		10					3
239-72	bhili- even, good					5				9	10					3
240-73	bhlaḡ- to hit								8		10	11				3
241-74	bhlagh-men- wizard			1		3?			6	8	10					4
242-75	bhlē- to howl + 161, 202								8			11	12			3
243-76	bhlēd- to bubble up + 141					5				9	10	11				4
244-77	bhleg ^h - to become bloated					5					10					2
245-78	1. bhlei- to glitter + 247, 248, 257											10	11	12	13	4
246-79	2. bhlei- to blow up + 199						5			?	10	11	12			4
247-80	bhlēiḡ- to glitter + 245										10	11	12			3
248-81	bhleiq- to glitter + 245										10		12			2
249-82	bhlendh- dim, reddish + 197	1									10	11	12			4
250-83	bhles- to glitter + 197										10					1

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
251-84	bhleu- to blow up + 199					5			8		10	11	12			5
252-85	1. bhlēu- to glitter + 197											11	12			2
253-86	2. bhlēu- weak, miserable + 206					5					10	11				3
254-87	bhleu-(k)- to burn + 197					5					10	?	?			2
255-88	bhlē-uo-s (of light colours) blue, yellow, blond + 197					5				9	10					3
256-89	bhleus- slack? + 206										10	11				2
257-90	bhlēido-s light, pale + 245							6	7		10	11	12			5
258-91	bhlīg- to hit					5			8	9		11	12			5
259-92	bhlōk- wool, tow, flock								8		10					2
260-93	bhlos-q- (root in) sounds									9		11				2
261-94	bhog- flowing water + 189									9	10	?				2
262-95	bhōgh- mud, swamp										10		12			2
263-96	bhōi- to be afraid	1	2			5			8		10	11	12			7
264-97	bhok- to flame, burn?			3					8							2
265-98	bholo- mist, steam			?						9		11				2
266-99	bhorg ^u o-s gruff + 173			3						9	10	11				4
267-100	bhoso-s naked + 230			3		?					10	11	12			4
268-101	bhoudhi- victory?									9	10					2
269-102	bhouk ^u os humming insect								8		10					2
270-103	bhrag- to smell + 213								8		10					2
271-104	bhrāter- member of the family, brother	1	2	3	4	5	6		8	9	10	11	12	13		12
272-105	bhred(h?)- to wade					4	6	7		?		11	12			5
273-106	1. bhreḡ- to break + 279, 281			1						8	9	10	11			5
274-107	2. bhreḡ- to stand up stiff			1			?			?	10					2
275-108	bhrēi- to cut + 214	1	2		4				8	9	10	11	12			8
276-109	bhren- to bulge + 212								8	9	10	11	12			5
277-110	bhrendh- to swell up + 212									9		11	12	13		4
278-111	bhrenk- to bring + 212									9	10			13		3
279-112	bhre(n)k- to be ensnared? + 273			1						9						2
280-113	bhren-to-s deer + 276							6	?		10	11				3
281-114	bhres- to burst + 273										9	10	11			3
282-115	bhreū- to sprout + 286, 293									8	9	10				3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
283-116	1. bhrēu- to cut + 214,	1								?	10	11	12			4
284-117	2. bhrēu- edge + 212									9	10	11				3
285-118	bhreū-ġ- to stroke + 214						?			?		11	12			2
286-119	1. bhreu-s- to swell + 282									9	10		12			3
287-120	2. bhreu-s- to break to pieces + 214							7	8	9	10					4
288-121	3. bhreu-s- to bluster + 286?										10	11	12			3
289-122	bhroisqo- bitter (to taste) + 214												12			1
290-123	1. bhrū- eye-brow	1	2		4	5				9	10	11	12	13		9
291-124	2. bhrū- beam									9	10		12			3
292-125	bhrūg- fruit; to enjoy								8		10					2
293-126	bhrugh-no- twig + 282									9	10					2
294-127	bhudh-m(e)n ground	1	2	3	4	5			8	9	10					7
295-128	bhūgo-s he-goat	1	2	3						9	10					5

Totals for Bh - 128

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	51	28	21	15	53	13	19	55	60	99	67	62	22	3	= 568
% of 128	40	22	16	12	41	10	15	43	47	77	52	48	17	2	
Rank	7	8	10	12	6	13	11	5	4	1	2	3	9	14	

D

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
296-1	dā- fluid, to flow	1	2	3		5		7		9					?	6	
297-2	dā- to divide +314,353	1	2	3		5	6		8	9	10		?	13	14	10	
298-3	dāiṣēr husband's brother	1		3		5			8		10	11	12			7	
299-4	daḱru- tear + 46					5			8	9	10					4	
300-5	dāu- to burn	1		3		5		7	8	9	10	?				7	
301-6	*daḡh-mó- slanting + 340, 529		1		3											2	
302-7	de- (demonstrative stem)	1	2			5			8	9	10	11	12		14	9	
303-8	dē- to tie	1	?			5		7								3	
304-9	dēg- to pack?										10			13		2	
305-10	1. dei- to glitter brightly		1	2	3	4	5		7	8	9	10	11	12	13	?	12
306-11	2. deṣ- to swing, spin	1				5				9		11	?			4	
307-12	deigh- to itch				3					9	10					3	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
308-13	deik- to show	1	2			5			8		10				?	5
309-14	1. deġ- to take + 334	1	2	?		5		7	8	9	?	11	?	13		8
310-15	2. deġ- to rip to pieces + 320				1						9	10	?			3
311-16	dek _m ten + 2027	1	2	3		5		7	8	9	10	11	12	13		11
312-17	1. del- to aim, calculate				?	5					10					2
313-18	2. del- to totter, shake	1									10	11				3
314-19	3. del- to split + 297	1		3		5		7	8	9	10	11	12	13		10
315-20	4. del- to dribble				3						9	10				3
316-21	5. del- long	1	2			5			8	9	10	11	12		14	9
317-22	dem- to build	1	2	3		5			8	9	10	11	12	13		10
318-23	(dema-) to tame	1	2			5		7	8	9	10				14	8
319-24	demel- worm?					5		?								1
320-25	denġ- to bite + 310	1	2			5		7			10					5
321-26	1. dens- great mental power + 322				1	2		5								3
322-27	2. dens- dense + 321						5		?	8					14	3
323-28	deph- to stamp, thrust				3	5							12			3
324-29	1. der- span of hand + 327					5		7		?	10	?				3
325-30	2. (der-) to grumble + 383	1				5				9		11	12	13		6
326-31	3. (der-) to run	1	2	3	4	5	6			9	10	11	12			10
327-32	4. der- to skin + 324	1	2	3		5	6		8	9	10	11	12	13		11
328-33	derbh- to wind	1	2	3		5					10		12			6
329-34	der(ep)- to see? + 332	1				5										2
330-35	dera- to work					5						11				2
331-36	dergh- to grasp				3	5				9	10					4
332-37	derġ- to look + 329	1	2			5		7		9	10					6
333-38	deru- tree	1	2	3	4	5		7	?	9	10	11	12	13	14	12
334-39	des- to find + 309					5		7					12			3
335-40	1. deu- to sink in	1	2			5										3
336-41	2. (deu-) to venerate	1							8		10					3
337-42	3. deu- to move forward	1	2	3		5			8	9	10		12		14	9
338-43	deuk- to pull					5		7	8	9	10					5
339-44	deup- dull thud (noise)					5						11	12	13		4
340-45	dagh-mó-s slanting + 301	1				5										2
341-46	digh- goat				3	4	5				10					4
342-47	dġp-ro- sacrificial animal				3						10					2
343-48	dlkú- (?) sweet					5			8							2
344-49	dnġhū tongue	1	2	3					8	9	10	11	12	13		9
345-50	dċ- to give	1	2	3		5	6	7	8			11	12		14	10

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
346-51	dous- arm	1	2							9		11	12			5
347-52	drē- to sleep	1		3		5			8				12			5
348-53	dreḡh- unwilling, vexed										10	11				2
349-54	dumb- penis			2							10	?				2
350-55	dus- evil, bad, mis-	1	2	3		5			8	9	10		12			8
351-56	duei- to fear	1	2	3		5			8							5
352-57	duō(u) two + 707	1	2	3	?	5		7	8	9	10	11	12	13	?	11

Totals for D - 57

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	38	26	25	4	46	4	16	25	28	36	21	22	13	8	= 312
% of 57	67	46	44	7	81	7	28	44	49	63	37	39	23	14	
Rank	2	5	6-	13-	1	13-	10	6-	4	3	9	8	11	12	

Dh

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
353-1	1. dhābh- to be astonished + 297, 361?					5					10	?	?			2
354-2	2. dhabh- to fix, suit			3					8		10	11	12			5
355-3	dhāl- to bloom + 369			3		5		7		9	?					4
356-4	dhanu- type of tree	1									10					2
357-5	1. dhau- to strangle		2		4	5	6				10		12			6
x	2. dhāu- + 365															
358-6	1. dhē- (redupl.) older member of family (child's language) + 364						5	6			?	11	12			4
359-7	2. dhē- to set + 1958	1	2	3	4	5	6		8	9	10	11	12	13	14	13
360-8	3. dhē- to pass away								8	9	10					3
361-9	dheb- thick, firm + 353?										10	11	12	13		4
362-10	dhebh- to injure + 375, 397		1	2		5									14	4
363-11	dheḡh- to burn		1	2		5		7	8	9	?	11	12	13		9
364-12	dhē(i)- to suck(le) + 358	1	2	3	4	5	6	7	8	9	10	11	12			11
365-13	dheḡ- to see, look	1	2			5		7								4
366-14	dhēḡh- to stab								8		10	11				3
367-15	dheigh- to knead clay	1	2	3	4	5			8	9	10	11	12	13		11
368-16	1. dhel- hollow					5				9	10		12			4
369-17	2. dhel- to light + 355			?						9	10					2
370-18	3. dhel- to tremble			3							10					2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
371-19	dhelbh- to dig										10	11	12			3
372-20	dhelg- to stab; needle							?		?	9	10	11			3
373-21	dhelgh- to hit?					?					10			?		1
374-22	dhem- to fly about like dust															
		1	2			5					9	10	11	12		7
375-23	(dhembh-) to dig + 362			3		5						?				2
376-24	1. dhen- to run, flow	1	2				6		8					13		5
377-25	2. dhen- flat (of hand)	1				5			8		10	?				4
378-26	3. dhen- to hit, thrust							7			10					2
379-27	1. dhengh- to press									9	10	11	12			4
380-28	2. dhengh- to reach	1				5				9			12			4
381-29	1. dher- dirt + 384, 385					5		7	8	9	10	11	12	13		8
382-30	2. dher- to hold	1	2	?	4	5			8	9	10	11	12		?	9
383-31	3. dher- to growl + 325	1		3		5				9	10	11	12	?		7
384-32	4. (dher-) to jump + 381	1				5				9						3
385-33	5. dher- dirt + 381					5			8		10	11	12			5
386-34	dherāgh- to pull 406, 1862, 1865, 1866, 1868, 1885, 1890, 1898, 1902									8	10		12			3
387-35	dherbh- to work			3							10	11				3
388-36	dherebh- coagulated	1				5					10					3
389-37	dheregh- (in names of berry- bearing thorny bushes)	1				?				9	?	11	12			4
390-38	dheregh- to turn		2	3				7						?	?	3
391-39	dhers- to dare, be bold	1	2			5			8		10	11		?		6
392-40	dhēs- (in religious concepts)		1	3		?			8							3
393-41	1. dheu- to run, flow	1	2		4	5	6			?	10		?			6
394-42	2. dheu- to pass away			3					?	9	10	11				4
395-43	3. dheu- shining bright	1	2			5										3
396-44	4. dheu- to fly about (like dust) + 399	1	2	3		5		7	8	9	10	11	12	13		11
397-45	dheu-b- deep, hollow +362				4	5	6			9	10	11	12			7
398-46	dheubh- peg, wedge					5					10					2
399-47	dheyes- to fly about (like dust) + 396		1			5		7	8	9	10	11	12			8
400-48	dheugh- to touch, press	1	2			5				9	10	11	12			7
401-49	dhlas- to squash?	1				5							12			3
402-50	dhlggh- guilt, duty									9	10		12			3
403-51	dhō- to sharpen	1	2			5					?					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
404-52	dhō(u)- rope?					5			?					?		1
405-53	dhrebh- to break (grind)															
	to pieces					?				10		12				2
406-54	dhreġ- to pull + 386	1								10	11					3
407-55	1. dhregh- to run			3	5				9	?						3
408-56	2. dhregh- to torment	1	2							10		12				4
409-57	dhreibh- to drive, thrust									10	11					2
410-58	dhreu- to crumble					5			9	10	11	12				5
411-59	1. dhreugh- to tremble					?				?	11	12				2
412-60	2. dhreugh- to deceive	1	2						9	10						4
413-61	dhrigh- hair, bristle					5			9		11	12				4
414-62	dhrono- brightly coloured?					?	6	?	?							1
415-63	dhug(h)ater- daughter	1	2	3		5			8	10	11	12	13			9
416-64	dhuen- to sound, drone	1								10	?					2
417-65	dhuer- to harm (by trick- ery)								8						14	3
418-66	dhuer- door	1	2	3		5		7	8	9	10	11	12	13		11
419-67	dhuergh- dwarflike?			?						10	?					1

Totals for Dh - 67

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	32	21	16	6	37	8	10	20	28	46	31	32	9	3	= 299
% of 67	48	31	24	9	55	12	15	30	42	69	46	48	13	4	
Rank	3	7	9	13	2	12	10	8	6	1	5	4	11	14	

E

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
420-1	1. ē near to + 1357	1	2	3		5			8		10	11	12			8
421-2	2. ē (exclamation)	1				5			8		10	11				5
422-3	3. e- (demonstrative particle) he, the +505	1	2	3	4	5		7	8	9	10	11	12		?	11
423-4	(ebhi ?) up to + 64	1	2						?		10	?	12			4
424-5	ed- to eat	1	2	3	?	5	?		8	9	10	11	12		14	10
425-6	1. edh- tip, point								8	9	10	11	12			5
426-7	2. edh- fence of stakes					?					10		12			2
427-8	eg- lack								8		10					2
428-9	ēġ- to speak, say	?	?	3		5			8							3
429-10	eġ- I +1162	1	2	3		5	6		8		10	11	12	13	14	11
430-11	eġhero- lake?					4	?	?				11	12			3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
431-12	eḡhi- hedgehog + 79			3	4	5					10	11	12			6
432-13	eḡhs out of			?	5				8	9		11	12			5
433-14	egnis fire	1							8			11	12		?	4
434-15	ehem (exclamation)	1							8		10					3
435-16	1. ei- to go	1	2	3		5			8	9	10	11	12	13	14	11
436-17	2. ěi (exclamation)	1	2			5			8	9	10	11	12			8
437-18	3. ei- bright, reddish	1		3		5			8	9	10	11	12			8
438-19	4. ei- stake, shaft	1				5					10	11	12			5
439-20	eibh- to copulate	1				5	6				10		12			5
440-21	eig- to lament					5				9	10					3
441-22	eik- to possess	1	2								10			?		3
442-23	1. eis- to move violently	1	2			5	6		8	9	10	11	12			9
443-24	2. ei-s- ice			2							10	11	12			4
444-25	ekyo-s horse	1	2		4	5	6		8	9	10	11		13	?	10
445-26	1. el- (colour root)															
	red, brown + 56	1	2	3	4	5	?		8	9	10	11	12			10
x	2. el- + 1071															
446-27	3. el- to be mouldy	1		3					8		10	11				5
447-28	4. el- (onomat. root) +56			3		5					10	11				4
448-29	5. el- to destroy			3		5			?	?						2
449-30	6. el- to drive			3		5				9	?					3
450-31	7. el- hungry; bad?									9	?	11	12			3
451-32	8. el- to bend; elbow	1	2	3		5		7	8	9	10	11	12	13		11
452-33	ēl- strip?	1				?					10					2
453-34	ēlā awl	1									10					2
454-35	elg- needy				3						10	11				3
x	elk- + 450															
455-36	elkos- abscess	1				5			8	?						3
456-37	em- to take								8	9		11	12		14	5
457-38	embhi- gnat, bee?					5					10					2
458-39	1. en in + 1292, 1303	1	2	3	4	5	6	7	8	9	10	11	12	13	?	13
459-40	2. en- year					5					10	11	12			4
460-41	ēn behold!					5			8							2
461-42	1. (enebh-) navel	1	2			5			8	9	10	11				7
462-43	2. (enebh-) damp; water															
	+1678	1	2	3		5	6		8	9	10		12		14	10
463-44	enek- to reach	1	2	3		5		?	8	9	10	11	12	?	14	10
464-45	ēneu without	1	2			5			?		10					4
465-46	e-neuen nine + 1313, 1317	1	2	3	4	5		7	8	9	10	11	12	13		12
466-47	eng ^u - bump, swelling					5			8		10					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
467-48	eno- that	1	2	3	?	5			8		10	11	12	?	?	8
468-49	en(o)mp- name	1	2	3		5		7	8	9	10	11	12	13	14	12
469-50	enos- burden	1				?			8							2
470-51	enq- (onomat.) to sigh					5		7	8	9	10	11	12			7
471-52	ent- to plot, originate	1	2			5		7		9						5
472-53	epero- (wild) boar				?				8		10	11	12			4
473-54	epi near to + 64	1	2	3		5	6	7	8	9	10	11	12	?	?	11
474-55	ēpi- companion	1				5										2
475-56	epop call of hoopoe		2	3		5			8		10	11	12			7
476-57	eph- to cook			3		5										2
477-58	1. er- eagle			3		5				9	10	11	12		14	7
478-59	2. er- he-goat			3		5			8	9		11	12			6
479-60	3. er- to set in motion + 491, 497, 1482, 1517	1	2	3	4	5		7	8	9	10	11	12		14	12
480-61	4. er- earth				?	5				9	10					3
481-62	5. er- loose + 103	1				5			?			11	12			4
482-63	ereb- to hollow out					?						11				1
483-64	ēreb(h) (in dark colours reddish brown + 1490						5	6	7		9	10	11	12		7
484-65	ered- to flow away	1	2			?	?			?						2
485-66	ereg ^u (h)o- pea, legume	?				5			8	?	10					3
486-67	1. erek- mite, louse	1		3				7	8			11				5
487-68	2. er(e)k- to split	1										11				2
488-69	1. eres- to stab	1	2									11	12			4
489-70	2. eres- to flow	1	2	3		5		7	8		10	11	12	13	14	11
490-71	1. ereu- to seek					5					10					2
491-72	2. ereu- to rip up + 479	1									10					2
492-73	1. erā- to row; oar	1				5			8	9	10	11				6
493-74	2. erā- to rest		2			5				9	10					4
494-75	er(ā)d- high; to grow		2					7	8	9	10		12	13		7
495-76	ergh- to shake	1	2			5					10	11				5
496-77	erk ^u - to beam + 105	1		3						9				13	14	5
497-78	ers- backside, tail + 479			3		5					10				14	4
498-79	es- to be	1	2	3		5	6	7	8	9	10	11	12	13	14	13
499-80	esu-s good, able					5			?	?					14	2
500-81	ēs- to sit	1	2												14	3
501-82	espen- summer, harvest					?				?	10	11	12			3
502-83	ēs-ṛ(g ^u) blood	1		3		5			8			11		13	14	7
503-84	et(e)n- kernel, corn?					5				9						2
504-85	ēter- intestines			?		5				9	10					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
505-86	eti beyond + 422	1	2		4	5	?		8	9	10	11		?		8
506-87	ētī- eiderduck + 75										10					1
507-88	ēt-mén- breath	1								?	10					2
508-89	ētro- quick, violent +115										10	11		?		2
509-90	1. eu- to lack; empty	1	2	3		5			8	9	10	11				8
510-91	2. eu- to dress			2	3				8	9		11	12		?	6
511-92	3. eu- to feel	1	2									11				3
512-93	4. eu- cry of joy					5			8							2
513-94	ēudh- udder	1				5			8		10	11	12			6
514-95	euk- to accustom oneself	1	2	3		5				9	10	11	12			8
515-96	eus- to burn + 132	1				5		7	8		10	11				6
516-97	eueg ^{uh} - to speak in a formal fashion	1	2	3		5			8							5

Totals for E - 97

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	56	39	37	9	65	9	15	51	40	67	58	46	12	16	= 520
% of 97	58	40	38	9	67	9	15	53	41	69	60	47	12	16	
Rank	4	8	9	13-	2	13-	11	5	7	1	3	6	12	10	

G and Ġ

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
517-1	ġāb- to look out for?										10		12			2
518-2	gag- something round (child's language)									?	10	11				2
519-3	1. gal- bald, naked										10	11	12			3
520-4	2. gal- to call + 616, 617?, 657?, 846	1	2			5			?	9	10	11	12			7
521-5	3. gal- to be able									9		11	12			3
522-6	gan(dh)- vessel									9	10					2
523-7	gang- to mock, scorn	1				5			8	?	10		12			5
524-8	ġār- to call + 556, 698		2	3		5			8	9	10					6
525-9	garəġ- dreadful				3	5				9		11	12			5
526-10	gau- to be glad					5			8	9		11		13		5
527-11	ġebh- branch, bough + 528										10	11				2
528-12	ġegh- branch, pale + 527				?						10	11				2
529-13	gēi- to bend? + 301, 340	1	?	?					8		10	11	?			4
530-14	gē(i)- to sing	1	2									11	12	13		5
531-15	ġēi- to sprout				3						10	11				3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
532-16	geid- to stab, tickle				3						10					2	
533-17	ḡeid- to suck					5						11				2	
534-18	geiḡ- to stab, bite		2	3				?		9		11				4	
535-19	ḡeis- gravel(stone)					?					10	11				2	
536-20	1. gel- to form into a ball		1	2		5		7	8	9	10	11	12			9	
537-21	2. gel- to envelop					5			?	9	10	?	12			4	
538-22	3. gel(ə)- cold; to freeze					5			8		10		?			3	
539-23	ḡel- bright				3	5				?	10	?	?			3	
540-24	gelebh- to scrape + 570					5				9			12			3	
541-25	ḡeli- mouse		1			5			8							3	
542-26	ḡ(e)lōḡ- husband's sister			?	?	5			8				12			3	
543-27	gem- to grasp				3	5			8	9	10	11	12			7	
544-28	ḡembh- to bite + 554		1	2	?	5		7			10	11	12	13		8	
545-29	ḡem(e)- to marry		1	2		5			8							4	
546-30	gen- to press together +867					5				9	10	11	12			5	
547-31	1. ḡen- to produce		1	2	3	4	5	6	7	8	9	10	11	12		12	
548-32	2. ḡen- to recognize		1	2	3		5		7	8	9	10	11	12	13	?	11
549-33	genebh- plug, pin (IE?)										10					1	
550-34	geng- lump					5			8		10	11	12			5	
551-35	gengh- to turn										10		12			2	
552-36	1. ḡenu- knee		1	2	3		5	6		8		10			13	14	9
553-37	2. ḡenu- chin(bone)		1	2	?	4	5			8	9	10	11		13		9
554-38	ḡep(h)- jaw, mouth; to eat + 544				2						9	10	11	12			5
555-39	1. ger- to collect		1				5			8	9	10	11	12			7
556-40	2. ger- (onomat.) to call hoarsely + 524, 584?		1		3	5		7	8	9	10	11	12				9
557-41	3. ger- to turn		1			5			8	9	10	11	12				7
558-42	4. ger- to grow; awaken		1	2		5		7			10						5
559-43	ḡer- rotten		1	2	3		5		8	9	10	11	12				9
560-44	gerebh- to slit + 577, 578					5					10	11	12				4
561-45	ḡers- to turn				3	5				9	10						4
562-46	ḡēu- to bend + 575		1	2	3	4	5		8	9	10	11	12		14	11	
563-47	ḡeu- to promote, hurry		1	2									12			3	
564-48	g(e)u-lo- glowing coal				3					9	10					3	
565-49	ḡeus- to taste, enjoy		1	2		5		7	8	9	10					7	
566-50	g(i)eu- to chew			2	3						10	11	12	13		6	
567-51	glag- milk					5			8							2	
568-52	gleḡ- soft, tender										10	11	12			3	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
569-53	ġlei- to run at, attack	1	2													2
570-54	gleubh- to cut + 540					5			8		10	11				4
571-55	glogh- barb, tip					5				?			12			2
572-56	1. gol- to lie, camp			3		5					10	11				4
573-57	2. gol- twig, bough			3									12			2
574-58	gōu- to call	1				5			?		10	11	12			5
575-59	gouā- hand + 562		2			5						11	12			4
576-60	gras- to eat (of animals)	1				5			8							3
577-61	grēb(h)o-s white beech + 560					4	6		8			11	12			5
578-62	gred- to scratch + 560							7			10					2
579-63	grem- to be damp								8		10	11	12			4
580-64	1. greus- to crumble										10	11	12			3
581-65	2. greus- to burn, smoulder					5						11				2
582-66	greut- to press, crush									9	10					2
583-67	grōd- hail? + 633, 670, 672, 674, 677				3				8			11	12			4
584-68	gru- to grunt + 556?					5			8		10					3

Totals for G and Ġ - 68

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	23	20	19	4	40	3	8	28	25	48	40	36	7	2	= 303
% of 68	34	29	28	6	59	4	12	41	37	71	59	53	10	3	
Rank	7	8	9	12	2-	13	10	5	6	1	2-	4	11	14	

Gh - Ġh

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
585-1	gha gha to chatter (e.g of geese) + 595, 596, 604, 605								7	9	10	11	12			5
586-2	ghabh- to seize	1							8	9	10	11	12			6
587-3	ghabh(o)lo- fork of branch					6				9	10					3
588-4	ġhāġ ^u h- young of animal	2						7								2
589-5	ghaido- he-goat								8		10					2
590-6	ghais- to remain fixed								8			11				2
591-7	ġhaiso- stick, staff	1				5				9	10					4
592-8	ghait-ā- curly hair		2		4	5				9						4
593-9	ġhal- harm, crime									9	10	11	?		?	3
594-10	ġhalg(h)- pliable twig			3							10	11				3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
595-11	ġhan- to yawn + 585					5				10						2
596-12	ġhan-s- goose + 585	1	2			5			8	9	10	11	12			8
597-13	1. ġhasto- rod, pole								8	9	10					3
x	2. ġhasto- + 649															
598-14	ġhau- to call	1	2	3		5				9	10	11	12			8
599-15	gha _{uo} - false								8	9						2
600-16	ġh _{dem} earth, floor	1	2		4	5		7	8	9	10	11	12	13	14	12
601-17	ġh _{di} yesterday	1	2			5		7	8	9	10					7
602-18	ġh _ū - fish				3	5						11				3
603-19	ghe- (emphatic particle) + 658, 1920	1	2	3		5	6		8	9		11	12	13	14	11
604-20	1. ġhē- to be empty, leave + 585	1	2			5			8	10						5
605-21	2. ġhē- to yawn + 585	1				5			8	10	11	12				6
606-22	ghebh-el- gable, head				4	5				10				13		4
607-23	ghed- to shit; hole	1	2	3	4	5		7		10						7
608-24	ghedh- to unite	1								10	?	12	13			4
609-25	ghegh- to crook, bend				3					10	11					3
610-26	ġ(h)eġh- polecat?	1										11				2
611-27	1. ġhei- to drive; wound + 652	1	2	3						9	10	11				6
612-28	2. ġhei- snow, winter	1	2	3		5	6	7	8	9	10	11	12		14	12
613-29	gheidh- to desire + 614									9	10	11	12			4
614-30	gheigh- to desire + 613	1								10	11					3
615-31	gheis to be roused	1	2							10		?				3
616-32	ghel- to call + 520	1				5				10	11	12				5
617-33	1. ġhel- to shine, yellow, green, grey, blue +520	1	2		4	5		7	8	9	10	11	12			10
618-34	2. ġhel- to cut?	1		3		5				9	10	11				6
619-35	ġhēlā wine?	1			4	5										3
620-36	gheldh- to desire	1	2										12			3
621-37	ghel(ē)ġh- (some form of) metal						?					11	12			2
622-38	ghel _d - ice		2			5							12			3
623-39	ghelġh- gland				3							11	12			3
624-40	ghel-ond- intestines, stomach					5							12			2
625-41	ghel-ōu- turtle, tortoise					5							12			2
626-42	ghel-tō- to be worth									10			12			2
627-43	ghelunā jaw				3	5				10						3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
628-44	ghen- to gnaw to pieces		2			5					10	11	12			5	
629-45	ghend- to grasp, seize					5		7	8	9	10		?			5	
630-46	ghendh- abscess					5					10					2	
631-47	ghengh- to stride	1	2			5			?		10	11				5	
632-48	1. gher- (onomat.) + 656	1							8		10		12			4	
633-49	2. gher- to stroke hard, rub + 583		1			5			8			11	12			5	
634-50	3. gher- to jut out + 644, 666					5		7		9	10		12			5	
635-51	1. gher- to desire	1	2			5			8	9	10					6	
636-52	2. gher- to scratch, slit + 646					5						11				2	
637-53	3. gher- to beam								?	9	10	11	12			4	
638-54	4. gher- to grip, seize + 641, 649		1			5			8	9	?	?			14	5	
639-55	5. gher- bowel		1			5			8		10	11				5	
640-56	6. gher- short, small	1	2			5				9						4	
x	7. gher- + 644																
641-57	gherdh- to embrace, encompass + 638		1	2		4	5		7	?		10	11	12	13	14	10
642-58	1. gher- revulsion		2	3						?	10	11				4	
643-59	2. gher- (in designations of weeds)											10	11			2	
644-60	ghers- to stare + 634	1	2	3		5		7	8	9	10					8	
645-61	gherto- milk, butter	1	2							9						3	
646-62	gherzd(h)- the prickly stuff i.e. barley + 636					?	5		7	8		10	?			4	
647-63	ghéslo- a thousand	1	2			5			?							3	
648-64	1. ghesor- hand?			3		5			?					13	14	4	
649-65	2. ghesto- hand, arm + 638	1	2						8			11				4	
650-66	1. gheu- to pour	1	2	3	4	5			8	9	10	11				9	
651-67	2. gheu- to disappear, die									9	10	11				3	
652-68	ghēu- to yawn + 611	?	?			5					10	11				3	
653-69	gheub(h)- to bend										10	11	12			3	
654-70	gheugh- to do sth. secretly	1	2								10	11				4	
655-71	gheueiā pit, hollow					5			8							2	
x	ghlādh- + 617																
656-72	ghlād- to resound, call + 632		1	2		5				9						4	
657-73	ghleu- to be happy + 520					5					10	11	12			4	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
658-74	ḡhō behind + 603				3							11	12			3
659-75	ghoilo-s frothing up									?	10	11	12			3
660-76	ghom- stall				3						10					2
661-77	ghōs- to eat	1	2						?			?				2
662-78	ghosti-s stranger, guest				?	?		?	8		10		12			3
663-79	ghou(ē)- to pay attention to, be aware of								8		10		12			3
664-80	ghou-ro-s	1									10		12			3
665-81	ghous- to sound, hear	1	2						?							2
666-82	(ghrē-) to grow, become green + 634										10					1
667-83	1. ghrebh- to grasp + 668, 671		1	2							10	11	12			5
668-84	2. ghrebh- to scratch, dig + 667										10	11	12			3
669-85	ghredh- to stride	1	2						8	9	10	11	12			7
670-86	ghrēi- to stroke over + 583					5					10	11				3
671-87	ghreib- to grip + 667										10	11				2
672-88	1. ghrem- to rub over sharply + 583										10	11				2
673-89	2. ghrem- to resound		2			5					10	11	12			5
674-90	ghren- to streak past + 583					5		7	8		10	11	12			6
675-91	ghrendh- beam								8		10	11	12			4
676-92	1. ghrēu- to collapse					5			8			11	12			4
677-93	2. ghrēu- to rub past sharply + 583					5			?	9	10	11	12			5
678-94	ghroud- (concerning curved parts of the body)									9	10					2

Totals for Gh and Ḡh - 94

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	41	33	17	8	48	3	13	30	32	67	51	40	6	6	= 395
% of 94	44	35	18	9	51	3	14	32	34	71	54	43	6	6	
Rank	4	6	9	11	3	14	10	8	7	1	2	5	12-	12-	

G_u - Ḡ_u - G_u^u

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
679-1	g _u ^u ā- to go, come	1	2	3		5		7	8	?	10	11		13		9
680-2	g _u ^u ādh- to dive	1	2			5				9						4

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
681-3	1. g ^u ēbh- to dive in	?	?		4	5					10					3
682-4	2. g ^u ēb(h)- slimy; toad										10	11	12			3
683-5	g ^u ēdh- to thrust, injure	1	2			5					10	11				5
684-6	1. g ^u ēi- to complain										10	?				1
685-7	2. g ^u ēi- to thrust together?								8		10					2
686-8	3. g ^u ēi- to live	1	2	3		5		8	9	10	11	12	13			10
687-9	g ^u ēi skin, hide?	1							9							2
688-10	g ^u ēid(h)- mud					5					10		12			3
689-11	g ^u ēiə- to overpower	1	2			5					10					4
690-12	1. g ^u ēl- to stab				3	5		7	?	9	10	11	12			7
691-13	2. g ^u ēl- to drip down	1	2			5				?	10			13		5
692-14	3. g ^u ēl- (originally) oak?				3	5		8			11	12				5
693-15	g ^u ēlhb- uterus, womb	1	2			5					10					4
x	g ^u ēm- +679															
694-16	g ^u ēnā woman, wife	1	2	3		5	?	7		9	10	11	12	13		10
695-17	1. g ^u ēr- to swallow	1	2	3		5		7	8	9	10	11	12			10
696-18	2. g ^u ēr- heavy	1	2			5		8	9	10	11	12	13			9
697-19	3. g ^u ēr- mountain + 717	1	2			5		7			11	12				6
698-20	4. g ^u ēr(ə)- to raise one's voice + 524		1	2		5		7	8	9	10	11	12			9
699-21	g ^u ēr- to shine; be hot	1									10	11				3
700-22	g ^u ēru- pale, spit			2		?		8	9	10						4
701-23	g ^u ēs- to extinguish	1				5				?	11	12				4
702-24	g ^u ēs- branches	1				5		7	8		10		12			6
703-25	1. g ^u ēt- resin	1						8	9	10						4
704-26	2. g ^u ēt- to talk	1	2	3							10					4
705-27	g ^u ēt- swelling + 562							8	9	10						3
706-28	g ^u ēiā sinew	1	2			5					?	?				3
707-29	g ^u ēis-ti-s finger? + 352									9	10					2
708-30	g ^u ēiu- resin				3					9			12			3
709-31	g ^u ētur(os) vulture					5		8								2
710-32	g ^u ēor-g ^u (or)o- dirt				3	5										2
711-33	g ^u ēou- bullock, ox, cow	1	2	3		5		8	9	10	11	12	13			10
712-34	g ^u ēou- dung	1	2	3	4			7	8	9	10	11	12			10
713-35	g ^u ēozd(h)- nail, penis									9			12			2
714-36	g ^u ērebh- fruit of the body					5				9			12			3
715-37	g ^u ēreig- to sleep?					5							12			2
716-38	g ^u ērendh- to swell					5		8					12			3
717-39	g ^u ēretso- thick, big? + 697							8	9							2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
718-40	$\text{g}^{\text{u}}\text{r}\bar{\text{e}}\text{u}\bar{\text{g}}\text{h}-$ to grind one's teeth					5				9		11	12			4

Totals for $\text{G}^{\text{u}} - \bar{\text{G}}^{\text{u}} - \text{G}^{\text{u}} - 40$

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	21	17	11	2	26	0	8	16	19	25	16	20	6	0	= 187
% of 40	53	43	28	5	65	0	20	40	48	63	40	50	15	0	
Rank	3	6	9	12	1	13-	10	7-	5	2	7-	4	11	13-	

$\text{G}^{\text{u}}\text{h} - \text{G}^{\text{u}}\text{h}$

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
719-1	$\text{g}^{\text{u}}\text{h}\bar{\text{d}}\text{ei}(\bar{\text{a}})$ to perish	1	2			5			8							4
720-2	$\text{g}^{\text{u}}\text{h}\bar{\text{d}}\text{er}-$ to run, flow	1	2	3		5										4
721-3	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{d}\text{h}-$ to ask for			2		5				9	?	11	12			5
722-4	(* $\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{i}-$) bright					5						11				2
723-5	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{i}\bar{\text{a}}-$ vein, tendon				3				8	9		11	12			5
724-6	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{l}-$ to want					5					10		12			3
725-7	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{l}-$ to become bent	1	2			5			8			11	12			6
726-8	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{l}\bar{\text{g}}-$ to look at?					5						11				2
727-9	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{m}\text{b}-$ to jump happily					5					10					2
728-10	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{u}\bar{\text{e}}\text{n}-$ to resound				3				7			11	12			4
729-11	1. $\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{n}-$ to swell	1	2	3		5						11	12			6
730-12	2. $\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{n}(\bar{\text{a}})-$ to hit	1	2	3		5		7	8	9	10	11	12		14	11
731-13	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{u}\bar{\text{e}}\text{r}-$ wild animal					5			8			11	12			4
732-14	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{r}-$ hot, warm	1	2	3	4	5	6	7	8	9	10	11	12			12
733-15	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{u}\bar{\text{o}}\text{i}\bar{\text{g}}^{\text{u}}-$ to shine					5						11	12			3
734-16	$\bar{\text{g}}^{\text{u}}\text{h}\bar{\text{e}}\text{u}\bar{\text{o}}\text{k}^{\text{u}}-$ to shimmer					5			8			11				3
735-17	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{r}\bar{\text{e}}-$ to smell	1				5								13		3
736-18	$\text{g}^{\text{u}}\text{h}\bar{\text{e}}\text{r}\bar{\text{e}}\text{n}-$ the diaphragm as the seat of everything intellectual															
						5					10					2

Totals for $\text{G}^{\text{u}}\text{h} - \text{G}^{\text{u}}\text{h} - 18$

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	7	7	6	1	16	1	3	7	4	5	12	10	1	1	= 81
% of 18	39	39	33	6	89	6	17	39	22	28	67	56	6	6	
Rank	4-	4-	7-	11-	1	11-	10	4-	9	8	2	3	11-	11-	

H (see also Kha)

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
737-1	hǎ ha! ah! (exclamation of astonishment)	1				5			8		10					4
738-2	ha ha ha ha (laughter)					5			8		10		12			5

Totals for H - 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	2	0	0	0	2	0	0	2	0	2	0	1	0	0	= 9
% of 2	100	0	0	0	100	0	0	100	0	100	0	50	0	0	
Rank	1-	6-	6-	6-	1-	6-	6-	1-	6-	1-	6-	5	6-	6-	

I

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
739-1	Il- mud					5						11	12			3
740-2	Ili- groin, intestines, genital organs?					5			8	?		?				2

Totals for I - 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	0	0	0	0	2	0	0	1	0	0	1	1	0	0	= 5
% of 2	0	0	0	0	100	0	0	50	0	0	50	50	0	0	
Rank	5-	5-	5-	5-	1	5-	5-	2-	5-	5-	2-	2-	5-	5-	

I

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14
741-1	iā- to be excited	1	2	3		5				9			12		6
x	iā + 435														
742-2	iag- to venerate	1	2			5								13	4
743-3	iagh- to hunt, desire	1	2								10				3
x	iāi- + 422														
744-4	iām to dig					5							12		2
x	iām- + 422														
745-5	iē- to throw				?	5			8					13	14 4
x	iēbh- + 439														
746-6	iēg- ice									9	10			?	2
747-7	iēg ^u ā strength (of youth)					5			?			11	?		2
748-8	iēk- to speak + 749	1							8	9	10	11		13	6
749-9	iēk- to heal? + 748					5				9					2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
750-10	iək ^u ɾ(t)- liver	1	2	?		5			8	?		11	?			5
751-11	iēlo- unripe									9		11	12			3
752-12	iem- to hold	1	2			?			8	9	?					4
753-13	iénater- sister-in-law	1		3	4	5			8			11	12			7
x	ie-ro- 435															
754-14	ies- to bubble, well up	1	2			5				9	10			13		6
755-15	iet- to let fly at sth.	1	2							9				?		3
756-16	1. ieu- to mix, mingle	1				5		7	8	9	10	11	12			8
757-17	2. ieu- to tie up + 763	1	2	3		5			8	9	10	11	12	13	14	11
758-18	3. ieu- young	1	2						8	9	10	11				6
x	4. ieu- 757															
759-19	ieu-dh- to be in violent motion		1	2		5			8	9		11	12	13		8
760-20	ieuġ- to excite, rouse		2								10			13		3
761-21	ieu-ni- right place (way)	1	2							9						3
762-22	ieuo- grain (especially barley)		1	2		5						11				4
763-23	ieuos- statute, rule + 757	1	2						8	9						4
x	io- + 422															
764-24	ioi-ni- reed								8	9	10					3
765-25	iork- animal in the deer family					5				9						2
x	iou- + 422															
766-26	iō(u)s- to gird		2			5		7				11	12			5
767-27	1. iu- her	1	2	3		5		7	8	9	10	11	12	13	14	12
768-28	2. iū- (exclamation of joy)					5			8	9	10	11	12			6

Totals for I - 28

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	17	16	4	1	17	0	3	13	18	11	13	10	8	3 = 134
% of 28	61	57	14	4	61	0	11	46	64	39	46	36	29	11
Rank	2-	4	10	13	2-	14	11-	5-	1	7	5-	8	9	11-

$$K - \tilde{K}$$
[illegible]

[illegible]

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
802-34	kan-tho- corner					5			8	9			12			4
803-35	kap- to grasp + 1604	1	2			5		7	8	9	10	11				8
804-36	kāp- piece of land					5					10					2
805-37	kāpo- swamped by water	1										11				2
806-38	kapro- he-goat	1				5			8	9	10					5
807-39	kap-ut head	1	2			5			8		10					5
808-40	kāpho- hoof	1	2								10					3
809-41	1. kar- to revile					5			8	9	10	11	12	?		6
810-42	2. kar- to praise aloud															
	+ 880	1				5					10	11				4
811-43	3. kar- (redupl.) hard	1				5	?		8	9	10		12			6
812-44	kār- wax					5			?			11	12			3
813-45	kars- to scratch	1							8		10	11	12			5
814-46	kas- grey	1	2			5			8	9	10					6
815-47	kas- to indicate the way	1	2	3												3
816-48	1. kat- to plait								8	9	10		12			4
817-49	2. kat- to have young								8		10		12			3
818-50	kat- to fight, struggle	1		?	?					9	10		12			4
819-51	kau- to humble					5					10	11				3
820-52	kāu- to hew, hit								8		10	11	12	13		5
821-53	kāu- to howl	1		3		5			8	9	10	11	12			8
822-54	kau(ə)lā swelling					5					10	11	12			4
823-55	kau-1- hollow + 909	1				5			8	9	10	11				6
824-56	kaus- to draw lots?					5							12			2
x	ke- + 946															
825-57	ked- to smoke	1				5						11	12			4
826-58	keg- peg + 793		2							9	10	11	12			5
827-59	kēi- to set in motion	1	2	3		5		7	8	?	10	11	12			9
828-60	1. kei- to lie, camp	1	2	3		5			8	9	10	11	12		14	10
829-61	2. kei- dark brown, grey															
	+ 900	1	2	3		5			8	9	10	11	12			9
830-62	kē(i)- to sharpen	1	2	3		5			8	9	10					7
831-63	kēi-bh- fast, violent															
	+ 833	1									10					2
832-64	keid- to fall									9	10					2
833-65	kēi-gh- fast, violent															
	+ 831	1									10		12			3
834-66	keip- to slant, slope	1	2									11				3
835-67	keipo- stake + 794	1						7	8							3
836-68	keis- arm, shin?	1									10	11				3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
837-69	ke ^k - weasel?	1										11				2
838-70	keku- hammer-shaped stick	2										11				2
839-71	keko- green fodder	1									10	11				3
840-72	ke ^k _u - dung + 788	1				5				9		11				4
841-73	1. kel- to rage, tower up					5			8	9	10	11	12			6
842-74	2. kel- to stab + 794	1						7		9	10		12			5
843-75	3. kel- to hit, hew + 794					5			8	9	10	11	12			6
844-76	4. kel- bright and dark spots + 881, 901, 902	1	2			5			8	9	10	11	12			8
845-77	5. kel- to drive + 854	1				5		7	8		10					5
846-78	6. kel- to call + 520	1				5			8	9	10	11	12		14	8
847-79	7. kel- beaker	1				5			8		10					4
x	7. (better 8.) + 1610															
x	8. (better 9.) + 1611															
x	9. (better 10.) + 1612															
x	10. (better 11.) + 1613															
848-80	kēl- to dumbfound					5			8		10					3
849-81	1. kel- cold, warm	1	2						8	9	10	11	12			7
850-82	2. kel- to bow, incline + 931									8		10	11			3
851-83	3. kel- thin shaft	1	?			5				9	10	11				5
852-84	4. kel- to hide + 937	1				5			8	9	10	?	?			5
853-85	kelb- to help										10	11				2
854-86	keleu- to wander + 845					5						11				2
855-87	k _e l _u yo- bald, bare	1	2	?					8	?						3
856-88	kelg- to wind around				3					9	10		12			4
857-89	kelp- jug, pot					5			8	9						3
858-90	1. kem- to press together			3		?					10	11	12			4
859-91	2. kem- to hum, croon	1									10	11	12			4
860-92	1. kem- pole, stick	1		3		5			?		10					4
861-93	2. kem- hornless (of otherwise horned animals) + 1616					1		5			10	11	?			4
862-94	3. kem- to cover, conceal	1							8	9	10					4
863-95	4. kem(?) - to make o.s. (become) tired					1		5		9						3
864-96	kem? - bite?						5				10	11				3
865-97	kemero- name of plant.	1				5					10	11	12			5
866-98	k _e mer- animals with armour					1		5			10					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
867-99	1. ken- to pinch + 546	1				5			8	9	10	11		13		7
868-100	2. ken- to scratch skin	1				5			8	9	10	11	12			7
869-101	3. ken- to come forth freshly		1	2		5			8	9	10		12			7
870-102	4. ken- to trouble o.s., strive eagerly					5			8	9						3
871-103	ken- empty, null				3	5										2
872-104	kenakó- golden (colour)	1				5			8		10	11				5
x	keng-, kenk- + 826															
873-105	1. kenk- to gird		1			5			8			11				4
874-106	2. kenk- to burn, injure	1				5					10	11				4
875-107	3. kenk- back of knee, heel		1								10	11				3
876-108	kenk- to dangle + 793	1							8		10				14	4
877-109	kens- to speak formally, announce + 1577		1	2				7	8				12			5
878-110	kenth(o)- rag		1		3	5			8		10					5
879-111	kent- to stab					5				9	10	11				4
880-112	1. ker- hoarse-sounding (onomat.) + 810		1	2	3	5			8	9	10	11	12	?		9
x	2. ker- + 1625															
881-113	3. ker(ə)- to burn + 844	1							8		10	11	12	?		5
882-114	4. ker- cherry + 1625?					?	5					11	12			3
883-115	5. (ker-?), kor- to hang					?						11				1
884-116	6. ker- dark, dirty, grey (colour) + 889		1	2	3	5	6	7	?	9	10	11	12			10
x	7. ker- + 1623 or 1624															
885-117	1. ker- upper part of body		1	2	3	5		7	8	9	10	11	12			10
886-118	2. ker- to grow				3	5		7	8		10	11				6
887-119	3. ker- string; to plait				3	5										2
888-120	4. ker- to wound, injure	1	2			5		7	8	9				13		7
889-121	kerbero- chequered + 884	1				5			?		?	?				2
890-122	1. kerd- to gird									9			12			2
891-123	2. kerd- skilled manually					5				9	10					3
892-124	kerdho- row, herd		1	2		5				9	10	11	12			7
893-125	(kered-) heart		1		3	5			8	9	10	11	12		14	9
894-126	(kerem-) type of onion,					5	?			9	10	11	12			5
895-127	kerap- leather rags, shoes + 899, 1625, 1628, 1629					5			?	9	10	11	12			5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
896-128	(kerk-) to shrivel up	1	2						8		10	11	12			6
897-129	kera- to mix	1	2			5					10					4
898-130	kerm- to tire, rest										10	11				2
899-131	kerno- chin-bone + 895	?							9		?		12			2
900-132	kē-ro- (colour root) + 829	1	2			5										3
901-133	kers- dirty colour + 844	1									10	11	12			4
902-134	1. kē(s)- bristle + 844	1								9	10	11	12			5
903-135	2. kērs- to run					5	?		8	9	10					4
904-136	kert- to turn (together)					5		7	8	9	10	11	12	?		7
905-137	kes- to scratch, comb	1	2			5			8	9	10	11	12			8
906-138	kēs- to cut	1				5		7	8	9	10		12			7
907-139	kēt- living-room, space	2				5			8		10		12			5
908-140	1. keu- to pay attention	1	2	3		5			8		10	11	12			8
909-141	2. keu- to bend + 823	1	2	?	?	5		7	8	9	10	11	12			9
910-142	1. keu- to swell	1	2	3		5		7	8	9	10	11	12			10
911-143	2. keu- to shine	1	2	3					9			11	12			6
912-144	1. kēu- to totter								8				12			2
913-145	2. kēu- to set alight					5						11				2
914-146	kēub- thorn										10	11				2
915-147	keuad- to shout + 1638	1	2			5					10		12			5
916-148	(keuap-) to smoke	1				5		7	8	9	10	11	12			8
917-149	kēuero north (wind)			?					8		?		11	12		3
918-150	kēuk- to light	1	2			5										3
919-151	kēuk- to mix together					5						11				2
920-152	kik- jay	1				5					10					3
921-153	1. kik- strap	1				5						11				3
922-154	2. kik- to dribble	1									10					2
923-155	kīker- pea (IE?)			3	4	5			8			?	?			4
924-156	kīōn- pillar			3		5										2
925-157	kīph- thin, pliable twig	1				5						11				3
926-158	kistō- plaited container					5				9						2
927-159	klā- to day down broadly + 1613										10	11	12			3
928-160	klādhra alder (tree)					5					10					2
929-161	klau- to weep					5		7								2
930-162	klēg- to shout, scream					5			8	9	10	11	12			6
931-163	klei- to bow, lean + 850	1	2	3		5			8	9	10	11	12			9
932-164	kleik- to press (painfully)	1										11	12			3
933-165	klem- slack	1				5				9						3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
934-166	kleng- to bend								8		10	11	12	13		5
935-167	kleno- maple				4	5					10	11	12			5
936-168	klep- damp? + 941, 1642, 1738					5			9		11					3
937-169	klep- to secrete + 794					5		8	9	10	11					5
938-170	klēp- to hold together in the arms and lap + 1610										10	11				2
939-171	klēu- hook					5		8	9	10	11	12				6
940-172	1. kkleu- to hear	1	2	3		5	6	8	9	10	11	12	13			11
941-173	2. kkleu- to swill + 936					5		8	9	10	11	?				5
942-174	klou-ni- buttock, hip + 1613			1		?		8	9	10	11					5
943-175	knei-g ^u h- to incline							8		10	11					3
944-176	kneug- (onomat.)					5					11					2
945-177	knid- louse + 1617?			3		5	7	9	10							5
946-178	ko- this			3	4	5		8	9	10	11	12			14	9
947-179	kob- to fit well							9	10		12					3
948-180	koi- creaking (onomat)					5				10	11	12				4
949-181	koi-lo- miserable; naked							9		11						2
950-182	koi-no- grass					5				11	12					3
951-183	koi- to worry							8	?	10						2
952-184	ko ko clucking (onomat)	1				5		8		10	11	12				6
953-185	ko ^k sā part of the body	1	2					8	9	10						5
954-186	kolā- to spin? + 1613					5		8								2
955-187	kolāmo-s stem, reed + 851					5		8		10	11	12	13			6
956-188	kol(ē)i- glue					5				10	11	12				4
x	koli- + 846															
957-189	kom alongside					5	6	7	8	9	10		12		14	8
958-190	konāmo- shinbone					5			9	10						3
959-191	konk- to be in doubt	1						8		10						3
960-192	konkho- mussel?	1				5		?		?						2
961-193	kop(h)elo-s type of carp	1				5					11					3
962-194	kopso- blackbird	1				5						12				3
963-195	korkā gravel, grit	1				5										2
x	kormen- + 884															
964-196	kormno- corrosive liquid including wine										10	11				2
965-197	kormo- torment, pain	2								10		12				3
966-198	koro-s war, army + 809	2				5			9	10	11					5
967-199	kos(e)lo- hazel								8	9	10	11				4

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
968-200	kost- leg, bone								8				12			2
969-201	krāpo- roof										10		12			2
x	krā- + 885 or 897															
x	krāt- + 904															
970-202	krā(u)- upon each other					5				9	10	11	12			5
x	kre-, krei-, k _g - + 885															
x	krē- + 888															
x	5. kreb- + 880															
971-203	krebh- to entrust?	1									10					2
972-204	kred- beams + 893										10	11	12			3
973-205	1. kreg- to torment	1									10					2
x	2. kreg- + 880															
974-206	1. krei- to stroke past										10	11				2
x	2. krei-, kreig-, kreik- + 880															
975-207	krei- to shine forth	1	2			5										3
976-208	1. krek- to hit					5					10	11	?			3
977-209	2. krek- frog or fish spawn											10	11	12		3
	3. krek- + 880															
978-210	4. krēk- to tower, jut out					5				9	10	11	12			5
x	krem- + 894															
979-211	1. krep- body, form	1	2					?	8	9	10					5
x	2. krep- + 880															
980-212	1. krēp- strong, firm										10		12			2
x	2. krēp- + 895															
981-213	1. kret- to shake									9	10	11				3
982-214	2. kret- to hit					5					10		?			2
983-215	1. kreu- thick (clotting) blood															
		1	2			5			8	9	10	11	12			8
984-216	2. kreu- to clash, fall										10	11				2
985-217	3. kreu- to thrust, hit					5					10	11	12			4
x	4. kreu- + 880															
986-218	kreup- scab									9	10	11	12			4
987-219	kreu-t- to shake										10	11		13		3
988-220	krom- lattice framework										10		12			2
989-221	kr(o)k-sko- arm	1						7				11	12			4
990-222	krūs- lower thigh, leg			3					8							2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
991-223	krūt- vault, breast + 1622, 1623, 1624									9		11				2
992-224	ksā- to burn? + 994	1		3												2
993-225	kseip- to throw, toss	1											12			2
x	ks-en, ks-es, ks-eu- + 905															
994-226	ksē-ro- dry + 992					5			8	10				13		4
995-227	keubh- to totter	1	2										12			3
996-228	kseud- to stamp into small pieces	1											12			2
997-229	k̄ei- to settle	1	2	3		5										4
998-230	k̄ē(i)- to attain, gain	1	2			5										3
999-231	ku- in words for 'kiss'	?				5				10					14	3
1000-232	kū- pointed; stake	1	2	3					8	9						5
1001-233	kūdh- dung					5						11				2
1002-234	kuku cuckoo (onomat)	1				5			8	9	10	11	12			7
1003-235	kup- shoulder	1	2					7			10					4
1004-236	kyak- to croak, quack (onomat)					5			8		10		12			4
1005-237	kyat(h)- to ferment	1							8		10	11	12			5
1006-238	1. k̄ei- mud, mire				3				8		10	11				4
1007-239	2. k̄ei- to twitter				3						10	11	12			4
1008-240	3. k̄ei- to shine	1	2			5					10	11	12			6
1009-241	k̄ek- to gape	1										11	12			3
1010-242	k̄el- muddy?				3							11				2
1011-243	kyelək- bale + 1013	1							8							2
1012-244	1. kyelp- to buckle at the knees					5					10	11				3
1013-245	2. kyelp- to vault + 1011 ?					5			?		10					2
1014-246	k̄en- to celebrate			2							10	11	12			4
1015-247	k̄endh-ro- (in designations for plants)									8	9	10	11			4
1016-248	kyerp- to turn					5				9	10			13		4
1017-249	k̄es- to pant	1	2	3					8		10	11				6
1018-250	kyēt- to shake + 1645					?			8	9	10	11				4
1019-251	kyoi- to wish, want	1				5						11				3
1020-252	k̄on- dog	1	2	3	4	5			8	9	10	11	?	13		10
1021-253	k̄res- small wood					5				9	10		12			4

Totals for K and $\hat{K}$ - 253

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	132	56	38	6	145	3	22	107	102	169	138	106	14	7	= 1045
% of 253	52	22	15	2	57	1	9	42	40	67	55	42	6	3	
Rank	4	8	9	13	2	14	10	5-	7	1	3	5-	11	12	

Kh

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1022-1	kha kha! (exclamation indicating laughter)	1		3		5			8		10	11	12			7

Totals for Kh - 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	1	0	1	0	1	0	0	1	0	1	1	1	0	0	= 7
% of 1	100	0	100	0	100	0	0	100	0	100	100	100	0	0	
Rank	1-	8-	1-	8-	1-	8-	8-	1-	8-	1-	1-	1-	8-	8-	

 K^u

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
x	k^u alo-s + 1646															
1023-1	k^u as-io- plaited work								8				12			2
1024-2	k^u as- to cough	1							7	9	10	11	12			6
1025-3	1. k^u ae (enclitic) and, somehow + 1035	1	2	3		5			8	9	10		12		14	9
x	2. k^u ae- + 1041															
1026-4	k^u ed- to stab, bore	?							8		10					2
1027-5	k^u ei-(t)- to pay attention to; regard with respect, punish, revenge		1	2		5				9		11	12			6
1028-6	2. k^u ei- to pile up		1	2		5							12			4
1029-7	k^u ei- to rest comfortably	1	2	3					8		10		12	13	14	8
1030-8	k^u ek- to appear, see	1	2			5							12			4
1031-9	1. k^u el- to turn	1	2			5		7	8	9	10	11	12	13		10
1032-10	2. k^u el- afar off		1			5				9						3
1033-11	3. k^u el- to swarm, crowd	1				5							12			3
1034-12	k^u em- to swallow, gulp	1	2	3		5					10					5
1035-13	k^u ene (particle indicating generality + 1025		1	2							10					3
1036-14	k^u enth- to suffer					5			9			11				3
1037-15	1. k^u er- to make, form	1	2			5			8	9	?	11	12			7

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1038-16	2. k ^u er- dish, dish-like	1								9	10					3
1039-17	k ^u era- to chew, grind	1				5										2
1040-18	k ^u etyer- four	1	2	3		5			8	9	10	11	12	13		10
1041-19	k ^u ō- (interrogative or relative particle)	1	2	3		5		7	8	9	10	11	12	13	?	11
1042-20	k ^u rei- to buy	1				5				9		11	12	13		6
1043-21	k ^u mi- worm, maggot	1	2					7		9		11	12			6
1044-22	k ^u sep- (?) dark	1	2			5										3
x	k ^u fei- + 791															

Totals for K^u - 22

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	19	13	5	0	15	0	4	8	12	10	9	14	4	3	= 116
% of 22	86	59	23	0	68	0	18	36	55	45	41	64	18	14	
Rank	1	4	9	13-	2	13-	10-	8	5	6	7	3	10-	12	

L

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1045-1	1. lā- (onomat) + 54	1	2	3		5		7	8	9	10	11	12			10
1046-2	2. lā- to be hidden					5			8		10		12	13		5
1047-3	lab- to lick with a smack- ing noise + 1054				3	5		7	8		10		12			6
1048-4	labh- to seize + 1478	1				5						11				3
1049-5	lāgh- to cut + 1649					5				9						2
x	lag ^u h- + 1649															
1050-6	lai- fat, lard					5			8							2
1051-7	laidh- to cut, injure					5			8			11				3
1052-8	laiyo- on the left					5	6					11	12			4
1053-9	lā(i)p- to shine	1				5				9	10	11	12		14	7
1054-10	lak- to lick with clicking sound + 1047				3							11	12			3
1055-11	lak- to sprinkle	?									10	11	12	13		4
1056-12	laku- collection of water in a ditch etc.					5			8	9	10		12			5
1057-13	lama (f) puddle, swamp?						6		8			11	12			4
1058-14	lāp- cow							7			10	11				3
1059-15	las- greedy	1				5			8	9	10	11	12			7
1060-16	lat- damp, wet					5				9	10	11				4
1061-17	lāu- to carry off as booty	1				5			8	9	10		12			6

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
1062-18	lauk(o)- throat + 1658					5					11	12				3	
x	lẽ- 1045																
1063-19	lẽb- to hang down slackly 1					5			8		10	11	12			6	
1064-20	1.leg- to dribble, drip			3						9	10					3	
1065-21	2. leg- to worry about sth					5		7								2	
1066-22	leg- to gather, collect					5		7	8		10					4	
1067-23	leg- to lie down + 1069					5		7	8	9	10	11	12	13	14	9	
1068-24	1. leg(h)- twig, branch							7				11	12			3	
1069-25	2. leg(h)- to crawl + 1067										10	11	12			3	
1070-26	leg ^u -h- light in movement 1 2 3	1	2	3		5	6		8	9	10	11	12			10	
x	1. lei- + 451																
1071-27	2. lei- to disappear + 1078, 1083, 1089					5				9	10	11	12	13		6	
1072-28	3. lei- slimy + 1073, 1085 1097, 1653			1		5			8	9	10	11	12			7	
1073-29	4. lěi- to pour, + 1072	1				5		?	8	9	10	11	12			7	
1074-30	1. lē(i)- to want					5			?	10						2	
1075-31	2. lē(i)- to grant, poss- ession + 1076, 1111	1				5					10	11	12			5	
1076-32	3. lē(i)- to leave behind + 1075					5		7	8		10	11	12			6	
1077-33	leid- to play, joke					5			8	?						2	
1078-34	1. leig- needy, miserable, illness + 1071			3		5		7		9		11				5	
1079-35	2. (lěig-) form										10	11				2	
1080-36	3. leig- to hop, tremble 1 2					5				9	10	11				6	
1081-37	4. leig- to tie, bind							7	8		10	11	12		14	6	
1082-38	leigh- to lick	1	2	3		5			8	9	10	11	12			9	
1083-39	1. leik- to offer for sale + 1071									8		11				2	
x	2. leik- + 451																
1084-40	leik ^u - to let, leave over 1 2 3					5			8	9	10	11	12			9	
1085-41	1. leip- to smear with fat + 1072			1	2		5		7	8		10	11	12	13	14	10
1086-42	2. leip- to desire					5						11				2	
1087-43	leis- to track down on the ground, furrow								8		10	11	12			4	
1088-44	1. leit- to abhor, detest					5				9	10					3	
1089-45	2. leit(h)- to go away, die + 1071			2		5					10			13		4	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	11	13	14	Set
1090-46	leizd- edge, hem							7			10					2
1091-47	1. (lek-?) to blame									9	10					2
1092-48	2. lek- limb of the body	1				5			8	9	10	11	12			7
1093-49	1. lēk- tendril; trap								8		10					2
1094-50	2. lēk- to tear to pieces					5		7	8				12			4
1095-51	1. lem- to break to pieces					5	6	?		9	10	11	12			6
1096-52	2. lem- with the look of wide open jaws						5		8	9		11				4
1097-53	1. lendh- wetness, spring + 1072										9	10				2
1098-54	2. lendh- loins, kidney								8		10		12			3
1099-55	3. lendh- free land, heath									9	10	11	12			4
1100-56	leng- to bend o.s. + 1102	1						7				11	12			4
1101-57	lengh- to scorn?					5				?		11				2
1102-58	lenk- to bend + 1100									?	10	11	12			3
1103-59	lento- pliable	1							8	9	10	11	12			6
1104-60	1. lep- (onomat)	1	2			?				9			12			4
1105-61	2. lep- peel, skin					5		7	8		10	11	12			6
1106-62	3. lep- rock, stone?					5			8							2
1107-63	lēp- to be flat		2								10	11	12			4
1108-64	lerd- to shrivel up			3		5				9	10					4
1109-65	lerg- smooth, even + 1133		3							9	?					2
1110-66	les- to collect									?	10	11				2
1111-67	(lēs)- slack + 1075								?		10	11	12	13		4
1112-68	leto- burning, heat, anger									9			12			2
1113-69	lēto- warm time, summer									9	10		12			3
1114-70	letro- leather + 1387										9	10				2
1115-71	1. leu- dirt + 1124					5		7	8	9		11				5
1116-72	2. leu- to cut off + 1129	1				5		7	8	9	10	11	12	13	14	10
1117-73	1. lēu- to leave behind										10	11	12			3
1118-74	2. lēu- stone					5		7		9						3
1119-75	3. lēu- (onomat) + 1045								8		10					2
1120-76	leubh- to like, love	1				5		7	8		10	11	12			7
1121-77	leud- to duck down									9	10	11	12			4
1122-78	1. leudh- to grow up	1	2			5		7	8	9	10	11	12			9
x	2. leu-dh- + 499															
1123-79	1. leug- to bend					5			8	9	10	11				5
1124-80	2. leu-g- blackish, swamp + 1115					?		5	6		?		12			3
1125-81	leuġ- to break	1	2	3		5		7	8	9	10	11				9

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1126-82	1. leugh- to tell lies										10	11	12			3
1127-83	2. leugh- oath									9	10					2
1128-84	leuk- to shine, light	1	2	3		5	6		8	9	10	11	12	13	14	12
1129-85	leup- to peel, break off															
	+ 1116		1			5		7	8	9	10	11	12			8
1130-86	lēut- raging?									9			12			2
1131-87	lī-no- linen?							7	8	9	10	11	12			6
1132-88	log- rod?					5							12			2
1133-89	lorgā- stick, club + 1109									9	10					2
1134-90	lou- to wash				3	5		8	9	10					14	6
1135-91	lūs- louse	1								9	10	11	12	?		5

Totals for L - 91

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	25	12	13	0	54	6	23	42	46	64	57	54	9	7 = 412
% of 91	27	13	14	0	59	7	25	46	51	70	63	59	10	8
Rank	7-	10	9	14	3-	13	8	6	5	1	2	3-	11	12

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[illegible]

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1154-19	ma-no- damp, wet								8	9	?					2
1155-20	manu-s man, human-being	1	2								10	?	12			4
1156-21	marko- horse									9	10					2
1157-22	1. math- (in words for) biting worms or vermin?				3						10					2
1158-23	2. math- hoe; mattock	1							8		10		?			3
1159-24	māter- mother + 1138	1	2	3	4	5		7	8	9	10	11	12	13		12
1160-25	mau-ro- tired, weak					5					10		12			3
1161-26	mazdo-s pole, mast								8	9	10		12			4
1162-27	1. me- me + 429	1	2	3		5	6	7	8	9	10	11	12	13	14	13
1163-28	2. me- mid(dle) + 1171			3		5	6	7			10					5
1164-29	1. mē- (that) not, lest + 65	1	2	3		5		7								5
1165-30	2. mē- to mow					5			8	9	10					4
1166-31	3. mē- to measure, mark off + 1169, 1223	1	2			5		7	8	9	10	11	12	13		10
1167-32	4. mē- big, considerable					5				9	10	11	12	13		6
1168-33	5. mē- to be under the influence of a violent and forceful will					5			8		10	11	12			5
1169-34	1. med- to measure + 1166	1	2	3		5			8	9	10					7
1170-35	2. med- to swell?					5				9						2
1171-36	medhi- middle + 1163	1	2	3		5	6		8	9	10	11	12			10
1172-37	médhu- honey	1	2			5				9	10	11	12	13		8
1173-38	mēgh- well-disposed + 1666					5					10	11				3
1174-39	meḡ(h)- big	1	2	3		5		7	8	9	10			13	14	10
1175-40	1. mei- to fix + 1178	1	2	3					8	9	10	11	12			8
1176-41	2. mei- to (ex)change + 1184, 1185, 1189	1	2						8	9	10	11	12			7
1177-42	3. mei- to wander, go					?			8	9		11	12			4
1178-43	4. mei- to tie + 1175	1	2			5						11				4
1179-44	5. mei- to lessen; small	1				5			8	9	10	11	12	13		8
1180-45	6. mei- (onomat= high, thin sounds and cries + 1190, 1269			1		5			8				12			4
1181-46	7. mei- mild, soft	1	2					7	8	9		11	12			7
1182-47	meigh- to flicker, blink + 1187			1	2	3	5		8	9	10	11	12			9
1183-48	meigh- to urinate	1	2	3		5			8		10	11	12	13		9
1184-49	mei-g ^u - to (ex)change + 1176					5			8							2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1185-50	mei-k̄- to mix + 1176	1	2			5			8	9	10	11	12			8
1186-51	mei-no- opinion, view									9	10		12			3
1187-52	meis- to flicker + 1182	1									10		12			3
1188-53	1. meit(h)- (place of stay) 2											11				2
1189-54	2. mei-t(h)- to (ex)- change + 1176	1	2			5			8	9	10	11	12			8
1190-55	mek- (onomat) to bleat + 1180		1	3		5			8		10	11	12			7
1191-56	1. mel- to grind	1	2	3		5		7	8	9	10	11	12	13	14	12
1192-57	2. mel- to miss, deceive		2	3		5				9		11				5
1193-58	3. mel- to hesitate					5			8	9						3
1194-59	4. mel- strong, big + 1202					5			8			11				3
1195-60	5. mel- limb	1		3		5				9		11		13		6
1196-61	6. mel- (in words for dirty or dark colours) + 1672		1			5		7	8		10	11	12			7
1197-62	7. mel- wool, woollen garment					5						11				2
1198-63	8. mel- to come forth	1				5	6	7		9		11	12			7
1199-64	1. meldh- to direct ritual words to God				3						10	11	12		14	5
1200-65	2. meldh- lightning									9	10	11	12			4
1201-66	mēlġ- to stroke off, wipe, milk + 1204	1	2			5		7	8	9	10	11	12	13		10
1202-67	melġh- to swell + 1194	1	2	3								11				4
1203-68	meli-t honey		2	3		5		7	8	9	10				14	8
1204-69	1. melk- to stroke + 1201								8							1
1205-70	2. melk- wet					5					10	11	12			4
1206-71	mēlo- small animal			3		5			8	9	10		12			6
1207-72	melōdh- elevation, head	1	2			5					10			13		5
1208-73	mels- to taste sth.								9				12			2
1209-74	membh- to reproach?					5				9	10					3
1210-75	mēmso- flesh, meat	1		3		5		7	8	9	10	11	12	13		10
1211-76	1. men- to lift one's head, rise + 1225, 1256			2					8	9	10					4
1212-77	2. men- to tread (down)	1			4	5			9			11	12			6
1213-78	3. men- to think + 1215	1	2	3		5		7	8	9	10	11	12	13	14	12
1214-79	4. men- small; to reduce + 1222		1	3		5			9	10	11			13	14	8
1215-80	5. men- to remain + 1213	1	2	3		5			8	9				13	14	8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1216-81	mend- to suck(le), breast + 1153?						6	7	8	9	10					5
1217-82	mend(ā, -om) mistake	1							8	9						3
1218-83	mendh- to direct one's mind (attention) to	1	2			5		7		9	10	11	12			8
1219-84	men(e)gh- copious, much	1								9	10	?	12			4
1220-85	men(ə)k- to knead + 1142	1				5		7			10	11	12			6
1221-86	meng- to make more beautiful		1	2		5		7	?	9	10	?		13		7
1222-87	mēni- name of fish? +1214					5					?		12			2
1223-88	mēnōt month + 1166	1	2	3		5		7	8	9	10	11	12	13		11
1224-89	1. menth- to swirl	1	2			5			8		10	11	12			7
1225-90	2. menth- to chew + 1211	1				5			8	9	10					5
1226-91	1. mer- to plait, weave					5				9	10	11	12			5
1227-92	2. mer- to flicker	1				5		7	8	9	10	11	12			8
1228-93	3. (mer-) to blacken, dark colour, spot of dirt ?					5						11	12			3
1229-94	4. mer- to die + 1230, 1238, 1239, 1674		1	2	3	5			8	9	10	11	12			9
1230-95	5. mer- to rub (up), rob + 1229		1	2	3	5		?	8	9	10	11	12		14	10
1231-96	6. mer- to disturb	1		3							10	11				4
1232-97	meradh- to bubble up					5						11				2
1233-98	mereġ- edge, frontier		2							9	10					3
1234-99	meregh- to moisten					5						11	12			3
1235-100	1. merġ- to cast off	1		3		5			8							4
x	2. merġ- + 1238															
1236-101	merġo- young man	1				5		7	?	9		11				5
1237-102	merġ- to grasp, seize	1				5			?							2
1238-103	1. merk- to rot + 1229							7	8	9	10	11	12			6
1239-104	2. merk- vexacious + 1229									9		11	12			3
1240-105	mə-r hand					5		7	8	9	10				14	6
x	met + 1165 or 1166															
1241-106	1. meu- damp	1	2	3		5			8	9	10	11	12			9
1242-107	2. meu- to push away + 1272		1	2		5			8		10	11				6
1243-108	mēudh- to be intent on		2			5			?	10	11	12				5
1244-109	1. meug- to lie in wait secretly and maliciously								8		10					2
1245-110	2. meug- to slip	1	2			5			8	9	10	11	12			8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1246-111	meuk- to scratch, slit	?	?			5			8		?	?				2
x	mue-s- + 1272															
1247-112	1. mezg- to dive down	1				?			8			11				3
1248-113	2. mezg- to knit, knot										10	11	?			2
1249-114	mizdhó- reward, pay	1	2			5					10		12			5
1250-115	mō- to trouble o.s.					5			8		10	11	12			5
1251-116	mōd- to meet				3						10					2
1252-117	modhro- blue, plant dye?										10		12			2
1253-118	moiso-s sheep, pelt	1	2								10	11	12			5
1254-119	moks- soon	1	2						8	9						4
1255-120	molko- leather bag					?	5				10					2
1256-121	mono- neck + 1211	1	2			5	6		8	9	10		12			8
1257-122	mori- sea								8	9	10	11	12			5
1258-123	mormor- (onomat) to murmur	1	3			5			8	9	10	11	12			8
1259-124	mormo(ro)- dread, horror					5			8							2
1260-125	moro- blackberry				3	5			8							3
1261-126	moruī- ant	1	2	?		5			8	9	10		12			7
1262-127	mō(u)-lo- root, plant	1				5										2
1263-128	mō(u)-ro- stupid	1				5										2
1264-129	moz-g-o marrow, brain	1	2								10	11	12	13		6
1265-130	mozgho-s young bullock				3	5										2
1266-131	mrk- edible root					5					10		?			2
1267-132	mreggh-m(n)o- skull					5					10					2
1268-133	mregghu- short	1	2			5			8		10					5
1269-134	1. mū- (onomat) sound made through closed lips + 1180															
		1	3			5			8		10	11	12		14	8
1270-135	2. mū- (onomat) fly, gnat			3		5		7	8		10	11	12			7
1271-136	mūk- heap					5				9	10					3
1272-137	mūs mouse; muscle + 1242	1	2	3		5		7	8		10		12			8
1273-138	mut-o-s curtailed, stunted								8	9						2

Totals for M - 138

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	73	51	40	3	96	8	29	70	71	92	75	73	19	13	= 713
% of 138	53	37	29	2	70	6	21	51	51	67	54	53	14	9	
Rank	4-	8	9	14	1	13	10	7	6	2	3	4-	11	12	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1274-1	1. nā- to help, use	1				5										2
1275-2	2. nā- to be afraid									9					14	2
1276-3	nāg ^u h- sober?			3		5										2
1277-4	nak- pelt	?				5					10	11				3
1278-5	nana (lulling word)	1	2			5		7	8	9	?		12			7
1279-6	nant- to dare									9	10					2
1280-7	nas- nose	1	2						8		10	11	12			6
1281-8	1. nāus- ship	1	2	3		5			8	9	10	11				8
1282-9	2. nāu- death, corpse									9	10	11	12			4
1283-10	1. ne (negative particle)	1	2	3		5			8	9	10	11	12	13	14	11
x	2. ne + 467															
1284-11	3. ne- we + 1943	1	2			5		7	8	9	10	11	12		14	10
1285-12	1. nebh- to burst?	1									10					2
x	2. nebh- + 462															
1286-13	1. ned- to turn, twist together, knot + 1303, 1304, 1306, 1680, 1684, 1688															
				2		5			8	9	10	11	12			7
1287-14	2. ned- to sound, bellow	1	2		4	5	6									5
1288-15	nedo- reed?	1	2	3								11				4
1289-16	neḡh- to bore, stab	?								9			12			2
1290-17	1. nei- to lead	1	2							9					14	4
1291-18	2. nei- to be moved, excited															
		?							8	9	10					3
x	3. nei-, ni- + 458															
1292-19	1. neid- to abuse + 458	1	2	3		5					10	11				6
1293-20	2. neid- to flow, stream	1								9		11	12			4
1294-21	neig ^u - to wash	1				5			8	9	10					5
1295-22	neik- to winnow grain					5				9		11				3
1296-23	nēik- to assail, assault					5				?	10	11	12			4
1297-24	nek ^f - mortal destruction, corpse + 80	1	2			5			8	9	10			13		7
1298-25	nek ^u -(t)- night	1				5		7	8	9	10	11	12	13	14	10
1299-26	1. nem- to apportion, take	2				5		7	8	9	10	11				7
1300-27	2. nem- to bend	1	2			5			?	9	10	11				6
1301-28	nepōt- nephew (= 1283 + 1456?)	1	2			5		7	8	9	10	11	12			9
1302-29	1. ner-(t-) life-force, man		1	2	3	5		7	8	9	10	11	12			10
1303-30	2. ner- below + 458?, + 1304					5			8		10					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set	
1304-31	3. ner- to break in + 1286						?			?		11	12			2	
1305-32	nes- to unite	1	2			5					10			13		5	
1306-33	nē-tr- snake + 1286									8	9	10				3	
1307-34	1. neu- to call, praise? 1									?	9					2	
1308-35	2. neu- to give s.o. a jolt, push		1			5				8	9	10	11	12		7	
1309-36	neu-d- to grasp for sth.									?	?	10	11			2	
1310-37	neu-dh- to desire, lust for										10	11				2	
1311-38	neuk- dark, unclear									8		11				2	
1312-39	neu-ks- to scent + 1286										10		12			2	
1313-40	neuos- new + 465		1	2	3	5				8	9	10	11	12	13	14	11
x	ni- + 458																
x	niz-do + 1543																
x	no- + 467																
1314-41	nog ^u - naked		1	2	3	5				8	9	10	11	12		14	10
1315-42	nog ^u o- tree?		1								10						2
x	nok ^u -(t-) + 1298																
x	nōmṣ + 468																
1316-43	nōt- buttock, back?					5				8							2
1317-44	nū- now + 465		1	2		5				8	?	10	11	12	13	14	9

Totals for N - 44

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	25	19	8	1	26	1	6	21	25	30	25	18	6	8	= 219
% of 44	57	43	18	2	59	2	14	48	57	68	57	41	14	18	
Rank	3-	7	9-	13-	2-	13-	11-	6	3-	8	11-	8	11-	9-	

N

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1318-1	ndhos under		1	2	3	5			8		10			13		7
1319-2	nsi- dirt, dirty coloured	1				5										2
1320-3	nsi-s sword		1	2						8						3

Totals for N - 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
% of 3	100	67	33	0	67	0	0	67	0	33	0	0	33	0	
Rank	1	2-	5-	8-	2-	8-	8-	2-	8-	5-	8-	8-	5-	8-	

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1321-1	o to, with + 420				4											1
1322-2	ō (exclamation) + 421	1				5			8	9	10	11	12			7
1323-3	obhel- to sweep				3	5										2
x	obhi + 423															
1324-4	1. od- to smell + 1325				3	5		7	8	?	10	11	12			7
1325-5	2. od- aversion + 1324				3	5			8		10				14	5
1326-6	ōd(e)go- stem	1								?		11				2
1327-7	ōg- to grow; fruit				?				9	10	11	12				4
x	oi- + 422															
1328-8	oid- to swell		1	2	3		5	?			10	11	12			7
x	oi-no- + 422															
x	oiya- + 437															
1329-9	ok- lofty + 1332					5					10					2
1330-10	okto(u) eight + 44		1	2	3	4	5		7	8	9	10	11	12	13	12
1331-11	ōkú-s quickly + 44		1	2			5			8	9			?		5
1332-12	ok ^u - to see + 1329		1	2	3		5		7	8	9	10	11	12	13	11
1333-13	ol-(e)- to destroy						5			8					14	3
1334-14	om- raw, coarse, bitter		1	2	3	4	5		7	8	9	10	11			10
1355-15	om(e)so-s shoulder		1		3		5			8		10			13	6
1336-16	omā- to proceed energetically			1	2			5				10			13	5
1337-17	ond- stone, rock			1	2						9					3
1338-18	oner- dream					3		5		7						3
1339-19	ong- coal			1	2						9		11	12		5
1340-20	ong ^u - to anoint			1		3				8	9	10	11			6
1341-21	ono- to revile, abuse				2			5			9					3
1342-22	onogh- finger- (toe-)nail		1	2	?			5		8	9	10	11	12		8
1343-23	1. op- to work, bring about		1	2				5		8	?	10			14	6
1344-24	2. op- to choose							5		8				12	13	4
x	opi + 437															
1345-25	ōr- to talk, call + 100		1					5		8			?	12		5
1346-26	orbho- orphan(ed)		1		3			5		8	9	10		12	?	7
1347-27	orey- bowel, intestine?							5		8						2
1348-28	orghi- testicle			2	3			5		7		9		11		6
x	org- + 1402?															
1349-29	ort- vine?					3				7						2
1350-30	ōs ash-tree					3		5	6	7	8	9	10	11	12	9
1351-31	ost(h)- bone		1	2	3			5		7	8	9			14	8
1352-32	oug- cold			?	?	3					9		11			3
1353-33	ō(y)j-om egg +131			2	3			5		8	9	?		12		6

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1354-34	óui-s sheep	1		3		5			8	9	10	11	12			8
1355-35	1. ōus- mouth	1	2					7	8	9	10	11	12		14	9
1356-36	2. ōus- ear		2	3		5		7	8	9	10	11	12			9
1357-37	ozdo-s branch				3	5					10					3
1358-38	ozgho- bud, twig?		2			5										2

Totals for 0 - 38

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	19	17	20	3	29	1	11	22	20	20	17	16	5	6	= 206
% of 38	50	45	53	8	76	3	3	29	58	53	45	42	13	16	
Rank	6	7-	3-	13	1	14	10	2-	3-	3-	7-	9	12	11	

P

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1359-1	pā- to feed + 1396				3	5			8	9	10		12	13	14	8
1360-2	pāk- to fix + 1449	1	2			5			8	9	10		12			7
1361-3	pān- woven fabric + 1697, 1700, 1708, 1724					5			8		10					3
1362-4	pando-s crooked + 1419								8		10					2
1363-5	pank- to swell + 140								8				12			2
1364-6	pap(p)a food, father (child's lang) + 91,1427				2	5			8		10					4
1365-7	pār- to show, be visible					5			8							2
1366-8	parikā concubine			2						9						2
1367-9	pāsó-s relative					5			8							2
1368-10	pasto- firm	1		3							10					3
1369-11	paus- free, loose					5						11	12			3
1370-12	pāuson- name of god + 158	1				5	6			?						3
1371-13	1. pēd- to hold, grasp	1									10	11				3
1372-14	2. pēd- foot	1	2	3		5		7	8	9	10	11	12	13	14	12
1373-15	(peg-) shoulder, hip	1							8			11	12	13		5
1374-16	pē(i)- to hurt	1	2	3		5			8		10					6
1375-17	pei(ə)- to be fat, swarm + 1381	1	2			5		?	8	9	10	11	12			8
1376-18	1. peig- to make distin- guishing marks with cuts or colours	1	2			5			8		10	11	12	13		8
1377-19	2. peig- to be hostile	1					6		8		10	11				5
1378-20	pei-m(i)- swift, rapid									9	10					2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1379-21	1. (peis-?) to trample	1	2			5			8		10	11	12			7
1380-22	2. peis- to blow	1							8	9	10	11	12			6
1381-23	peisk- fish + 1375								8	9	10		12			4
1382-24	1. peĕ- to make pretty, contented										?	10	11			2
1383-25	2. peĕ- to pluck wool or hair + 1387, 1440	1	2	3		5		7	8		10	11				8
1384-26	pek ^u - to cook	1	2	3		5		7	8	9	10	11	12	13		11
1385-27	1. pel- to pour + 1442, 1444	1	2	3		5		7	8	9	10	11	12			10
1386-28	2a. pel- to set in motion 1387, 1388					5			8	9	10					
	2b. pel- dust, meal (2a + following)	1										11	12			7
1387-29	3a. pel- to fold + 1386	1	2	3		5		7	8	9	10					
	3b. pel- to hide; skin + 1114 (3a + following)											11	12			10
1388-30	4. pel- vessel + 1386	1				5			8		10					4
1389-31	5. pel- to sell, earn					5					10	11	12			4
1390-32	6. pel- grey (dull colours)	1	2	3		5		7	8	9	10	11	12			10
1391-33	7. pel- to burn, be warm									9	10	?	12			3
1392-34	pelā- broad, flat + 1435, 1436, 1437, 1446	1	2	3		5		7	8	9	10	11	12		14	11
1393-35	pelī-s- rock	1				5	6			9	10					5
1394-36	pelĕ- to turn									9	10		12			3
1395-37	pelpo- made of wood?	1							8							2
1396-38	1. pen- to feed + 1359								8		?	11				2
1397-39	2. pen- mud, swamp	1					6			9	10	11				5
1398-40	penk ^u e five + 1449?	1	2	3		5		7	8	9	10	11	12	13	14	12
1399-41	pent- to tread, go	1	2	3		5					10	11	12			7
1400-42	1. per- to spray + 1409, 1461, 1698, 1702, 1718, 1719, 1720, 1721, 1722, 1723, 1731	1	2			5	?				10	11	12		14	7
1401-43	2. per- passing beyond + 1466	1	2	3		5	6	7	8	9	10	11	12		14	12
1402-44	3. per- to hit + 1404	1	2	3		?		7	8	9		11	12		?	8
1403-45	perd- to break wind + 231	1	2			5		7		9	10	11	12			8
1404-46	1. perg- pole, stem + 1402								?		10	11	12			3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1405-47	2. perg- fear										10			?		1
1406-48	1. perk- to fill (up)?	1								9						2
1407-49	2. (perk-) glowing ash									9		11				2
1408-50	1. perġ- rib(-box), breast	1	2									11	12			4
1409-51	2. perġ- speckled + 1400	1			?	5	6		?	9	10					5
1410-52	3. perġ- to rip up, open + 1453		1						8	9	10	11				5
1411-53	4. perġ- to ask, request	1	2	3			6		8	9	10	11		13		9
1412-54	perġ ^u -s oak	1					6		8	9	10	11				6
1413-55	pers- to spray	1	2								10	11	12	13	14	7
1414-56	persnā heel	1	2			5			8	10					14	6
1415-57	perth- pole, stick			3		5			?				?			2
1416-58	1. pēs- to blow + 1417		?								10		12			2
1417-59	2. pēs- dust, sand + 1416	1	2										12			3
1418-60	3. pes- penis	1				5			8	10						4
1419-61	1. pet- to stretch out (especially arms) + 1362		2			5			8	9	10	11			14	7
1420-62	2. pet- to tumble down on	1	2	3		5			8	9	10	11			14	9
1421-63	1. peu- to purify	1	2			?			8	9	10					5
1422-64	2. peu- to explore					5			8				12			3
x	3. peu- + 1471															
1423-65	pēu- to hit; sharp					?			8	10	11					3
1424-66	peuġ- to stab; box				4	5	6		8	9	10	11				7
x	peu - + 1472															
1425-67	peuōr fire			3		5			8	10	11	12	13	14		8
1426-68	pezd- to cause a wind to blow softly + 231					5			8			11	12			4
1427-69	pāté(r) father + 1364, or 1450		1	2	3	5			8	9	10			13		8
1428-70	pid- to bear (children)									9	10					2
1429-71	pik(h)o- lumpy; a knot?		2									11				2
1430-72	pi-lo- hair					5			8				12			3
1431-73	pi-n- piece of wood + 1699	1				5					10		12			4
1432-74	pīp(p)- to squeak	1		3		5		7	8	9	10	11	12			9
1433-75	pīzdā- female pudenda + 231							7				11	12			3
1434-76	plab- to prattle								?	9	10					2
1435-77	1. plā-k broad, flat + 1392					5			8	9	10	11	12	13		7
1436-78	2. plāk- to hit + 1392					5			8	9	10	11	12			6
1437-79	plāt- broad, flat + 1392	1	2	3		5			8	9	10	11	12			9
1438-80	plē- to split off + 1441										10	11				2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1439-81	plēi- bald, naked + 1704, 1706, 1728										10	11	12			3
1440-82	plek- to plait + 1383	1	2			5		7	8		10		12			7
1441-83	plēk- to rip off + 1438							?			10	11				2
1442-84	pleu- to run, flow + 1385	1	2	3		5	6		8	9	10	11	12	13		11
1443-85	pleuk- flock, feather										10	11				2
1444-86	pl(e)u-mon- lung + 1385	1				5			8			11	12			5
1445-87	pleus- to pull, pluck out								8		10	11				3
1446-88	plai- to parade, show off + 1392					5			8			11				3
1447-89	plouto- sth. made of boards or sticks								8		10	11				3
1448-90	pneu- to pant, breathe					5					10					2
1449-91	pṅksti- fist? + 1360 or 1398										10		12			2
1450-92	1. pō(i)- to pasture and protect cattle + 1427	1	2			5					10	11				5
1451-93	2. pō(i)- to drink	1	2	3		5		7	8	9		11	12			9
1452-94	polo- swollen, thick			?					8	?			12			2
1453-95	porko-s pig(let) + 1410		2						8	9	10	11	12			6
1454-96	pos directly next to, be- hind, in front of + 94	1	2	3		5		?	8			11	12			7
1455-97	po-ti opposite, towards		2			5										2
1456-98	poti-s master of the house, lord, husband	1	2			5		7	8		10	11	12	13	14	10
1457-99	pōu- small		2	3		5		7	8		10	11	12			8
1458-100	pougo- clear, pure									9			12			2
1459-101	prā- to bend?								8	9		?				2
1460-102	prāi- to like; spare	1	2			5				9	10	11	12			7
1461-103	preg- greedy, violent + 1400										10		12			2
1462-104	prep- to catch sight of			3		5				9	10					4
1463-105	pret- to understand									9	10	11		13		4
1464-106	preu- to jump, hop		1								10		12			3
1465-107	preus- to freeze; burn	1						7	8		10					4
1466-108	prīs- to reduce to small pieces?					5		7								2
x	pro- + 1401															
1467-109	prōkto- backside, rump			3		5										2
1468-110	? pr̥so- garlic, leek (loan?)					5			8							2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1469-111	pster- to sneeze			3		5			8	9						4
1470-112	ptel(e)ia type of tree?					5	6		8							3
1471-113	1. pŭ- to blow up + 158	1	2	3		5		7	8	9	10	11	12			10
1472-114	2. pŭ- to rot, stink	1	2	3		5			8	9	10	11				8
x	3. pŭ- + 1457															
1473-115	1. pŭk- thick-haired	1									10	11	12			4
1474-116	2. pŭk- to press together	2				5		7								3
1475-117	pu-lo- stiff hair	1				5				9						3
1476-118	pŭ-ro- grain, kernel					5					10	11	12			4

Totals for P - 118

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	59	44	30	1	68	11	21	68	51	83	66	59	14	12	= 587
% of 118	50	37	25	1	58	9	18	58	43	70	56	50	12	10	
Rank	5-	8	9	14	2-	13	10	2-	7	1	4	5-	11	12	

Ph

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1477-1	phŏl- to fall				3						10	11				3

Totals for Ph - 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	0	0	1	0	0	0	0	0	0	1	1	0	0	0	
% of 1	0	0	100	0	0	0	0	0	0	100	100	0	0	0	
Rank	4-	4-	1-	4-	4-	4-	4-	4-	4-	1-	1-	4-	4-	4-	

R

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1478-1	rabh- to be in a rage + 1048									8	?			13		2
1479-2	?rāp- rape (vegetable) (IE?)					5			8	?	10	11	12			5
1480-3	rās- to (re)sound	1									10					2
x	1. rē- + 96															
x	2. rē- + 481															
x	3. rē- + 492															
x	4. rē- + 493															
1481-4	5. rē- dark	1									10					2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
x	6. re- + 1493															
1482-5	1. rebh- to move, hurry about + 479										9	10				3
1483-6	2. rebh- to vault					5					10		12			3
x	red- + 484															
1484-7	1. rēd- to cheer up										10	11	12			3
1485-8	2. rēd- to scrape, gnaw								8	9	10					3
1486-9	1. reg- to dye?	1				5										2
1487-10	2. reg- to see?							7				11				2
1488-11	1. reġ- straight + 1499	1	2	3	?	5	6		8	9	10	11	12	13		11
1489-12	2. reġ- damp							7	8		10	11				4
1490-13	reg ^u os- darkness + 483	1		3		5					10			?		4
1491-14	1. rei- to scratch + 1498	1	2			5			8	9	10	11	12			8
1492-15	2. rei- striped in bright colours, spotted					1					9	10	11	12		5
1493-16	3. rei- to scream + 1495, 1516					1					8	9	10	11	12	6
1494-17	4. rei- possession, thing	1	2						8							3
x	5. rei- + 1496															
x	1. rēi- + 96															
x	2. rēi- + 98															
1495-18	reibh- to (re)sound? + 1493	1										11				2
1496-19	reid- to lean against, support + 1500, 1503, 1507						5		8							2
1497-20	reidh- to go (in a vehicle)					5				9	10	11				4
1498-21	reig- to tie + 1491									9	10					2
1499-22	(reig-) to stretch out + 1488									9	10	11				3
x	rei- + 479															
1500-23	reik- to stretch, totter + 1496										10	11				2
1501-24	rei-r(ēi)- to quake,	1									10					2
1502-25	rēito- joint, shoulder of animals					3						11	12			3
1503-26	1. rek- to tower up + 1496										10	11				2
1504-27	2. rēk- to arrange	1									10		12	13		4
1505-28	reġ- to bind?	1									10					2
1506-29	rek ^h - to injure + 1528	1	2			5										3
1507-30	rem- to rest + 1496	1	2			5				9	10	11		13		7

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1508-31	remb- to hack, hoe										10	11	12			3
1509-32	rendh- to rip (to pieces) 1										10					2
1510-33	rent- thing?	1								9		11				3
1511-34	rep- to grab	1				5		7	8	9	10	11				7
1512-35	1. rēp- to crawl								8		10	11	?			3
1513-36	2. rēp- stake, beam										10	11	12			3
x	rēs- + 489															
1514-37	ret(h)- to run, roll	1	2							8	9	10	11			6
1515-38	rēt- pole, stick, stem									?	10		12			2
1516-39	1. reu- to bellow + 1493	1				5				8	9	10	11	12		7
1517-40	2. reu- to rip up, dig + 479	1	2			5				8	9	10	11	12		8
x	3. reu- + 479															
x	4. reu- + 490															
1518-41	reu-b to belch		2	3		5		?	8		10	11	12			7
1519-42	reudh- red	1	2	?		5	?			8	9	10	11	12	13	9
1520-43	reugh-men- cream?		2								10					2
1521-44	reus- elm									9	?					1
1522-45	reu-smen- to ruminate; throat		1							8	9					3
1523-46	reuto- stomach of animal, intestine					2					10					2
1524-47	reu- to open		2							8	9	10	11	12	13	7
1525-48	rezg- to weave, plait	1								8	10	11	12			5
x	roi-no + 1491															
x	rughio + 2044															
1526-49	ru(k)- fabric, spun yarn										9	10				2

Totals for R - 49

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	24	13	4	0	15	1	3	19	20	38	27	18	6	0	= 188
% of 49	49	27	8	0	31	2	6	39	41	78	55	37	12	0	
Rank	3	8	10	13-	7	12	11	5	4	1	2	6	9	13-	

R

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1527-1	rksā fetlock joint of hooved animals + 1092	1										?				1
1528-2	rks- bear + 1506	1	2	3		5		7	8	9					?	7

Totals for R - 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	2	1	1	0	1	0	1	1	1	0	0	0	0	0
% of 2	100	50	50	0	50	0	50	50	50	0	0	0	0	0
Rank	1	2-	2-	8-	2-	8-	2-	2-	2-	8-	8-	8-	8-	8-

S

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1529-1	sā- enough + 1537	1		3		5			8	9	10	11	12			8
1530-2	sāg- to scent out					5			8	9	10				14	5
1531-3	sāi- pain, illness	?				5				9	10	11				4
1532-4	saip- enclosure of thickets					5			8							2
1533-5	sak- to sanctify								8						14	2
1534-6	1. sal- salt + 1535	1		3	4	5	6	7	8	9	10	11	12	13		12
1535-7	2. sal- dirty grey + 1534	1							8	9	10		12			5
1536-8	sālo- wavy							6	8	9		11				4
1537-9	sano-s healthy? + 1529								8							1
1538-10	sap- to taste		2	3				6	8	9	10					6
1539-11	sasio- agricultural produce	1	2							9						3
x	sā-ti- + 1529															
1540-12	saus- dry	1	2			5		7	8		10	11	12			8
1541-13	sāuel- sun + 1802, 1805	1	2			5		7	8	9	10	11	12			9
1542-14	se- to the side, of one's own + 1578, 1785, 1804	1	2	3		5	6	7	8		10	11	12			10
1543-15	sed- to sit + 1357	1	2	3		5			8	9	10	11	12			9
1544-16	1. seg- to sow (seed) + 1548, 1549, 1557								8	9						2
1545-17	2. seg- to tack on, attach	1	2							9	10	11	12			6
1546-18	segh- to hold fast	1	2			5	6			9	10					6
1547-19	sei- to drip + 1553, 1554							6		9	10	11				4
1548-20	1. sē(i)- to sieve + 1544					5		7		9	10	11	12			6
1549-21	2. sē(i)- to dispatch + 1544	1	2			5			8	9	10	11	12			8
1550-22	3. sē(i)- to tie + 1598, 1599	1	2			5			8	9	10	11	12		14	9
1551-23	sē(i)dh- to go straight at a target, aim	1	2			5										3
1552-24	sēik- to reach, grip					5				10	11					3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1553-25	seik ^u - to pour out + 1547	1	2			5	?		8	9	10		12			7
1554-26	seip- to pour out + 1547								8		10		12	13		4
1555-27	1. sek- to run off (water)	1	2			5			9	?	11	12				6
1556-28	2. sēk- to cut + 794							7	8	9	10	11	12			6
1557-29	3. sēk- to leave behind, abate + 1544					5			8							2
1558-30	1. sek ^u - to follow + 1559	1	2			5			8	9	10	11				7
1559-31	2. sek ^u - to notice + 1558					5			8	9	10	11	12	13	14	8
1560-32	1. sel- living-space										10	11	12			3
1561-33	2. sel- beam, board					5		7			10	11				4
1562-34	3. sel- to take, seize					5			9	10			12			4
1563-35	4. sel- to jump		1			5			8	9		11	12			6
1564-36	5. sel- to creep, crawl	1	2	?		5		7	9		11					6
1565-37	6. sel- favourable + 1694					5			8	9	10					4
1566-38	selg- to let free		1	2					9	10						4
1567-39	selk- to pull + 1980, 1981			3		5		7	8		10			13		6
1568-40	selos- swamp, lake		1	2		5										3
1569-41	selp- fat (butter)		1			5		7			10			13		5
1570-42	1. sem- to draw, scoop					5	6		8	9		11			?	5
1571-43	2. sem- one, together	1	2	3		5		?	8	9	10	11	12	13		10
1572-44	3. sem- summer		1	2	3				9	10						5
1573-45	sēmi- half		1			5			8		10					4
1574-46	sen- to prepare + 1689?, 1692?		1			5			9						14	4
1575-47	sendhro- coagulated										10		12			2
1576-48	seng ^u - to fall, sink			3		5					10					3
1577-49	seng ^u -h- to sing + 877		1			5			9	10						4
1578-50	seni- for oneself + 1542	1	2			5			8	9	10		12	13		8
1579-51	senk- to burn										10		12			2
1580-52	sen(o)- old		1		3	5			8	9	10	11				7
1581-53	sent- to take a direction. go			2	3				8	9	10	11	12			7
1582-54	sep- to concern o.s. with	1	2			5			8							4
1583-55	septm seven		1	2	3	5		7	8	9	10	11	12	13	14	12
1584-56	1. ser- to stream + 1734	1	2		4	5	6	?	8	9		11	12			9
1585-57	2. ser- to give shelter to, protect			2		5			8			11	?			4
1586-58	3. ser- red(dish)		1						8		10	11	12			5
1587-59	4. ser- to line up		1			5			8	9	10	11			14	7
1588-60	5. ser- sickle		1			5			8		10	11	12			6

[illegible]

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1616-88	(s)kēm- mutilated, de- formed, hornless + 861	1									10					2
1617-89	(s)ken-(d-) to split off + 794									9	10					2
1618-90	skendh- to dive under					5						11				2
1619-91	(s)keng- to hobble	1				5					10					3
1620-92	1. (s)kep- to cover, hide					5						11	12			3
1621-93	2. (s)kēp- to cut with a sharp tool, split		2			5	6	7	8	9	10	11	12			9
1622-94	1. (s)ker- to wrinkle up + 991											10	11	12		3
1623-95	2. (s)ker- to jump (around) + 991		1	2		5		7	8	9	10	11	12	13		10
1624-96	3. (s)ker- to turn, bend + 991		1	2		5		7	8	9	10	11	12			9
1625-97	4. (s)ker- to cut + 895	1	2	3		5	6	7	8	9	10	11	12	13	14	13
x	5. (s)ker- + 880															
x	(s)k ^u er- + 1037															
1626-98	sker-(d-) excrement, dung	2				5			8	9	10	11	12		14	8
1627-99	(s)kerb(h)- to turn					5			8	9	10	11	12			6
1628-100	(s)ker-dh- pitiful, small + 895		1			5						11				3
1629-101	(s)kert-s- across, straight through + 895				3	5						11	12			4
1630-102	skēt- to jump					?			8		10	11				3
1631-103	skēth- to injure, damage			?		5				9	10					3
1632-104	1. (s)keu- to get ready, carry out					5					10		12			3
1633-105	2. (s)keu- to cover	1	2	3		5			8	9	10	11	12			9
1634-106	3. skēu- to sneeze	1	2								10	11	12			5
x	4. (s)keu- + 908															
x	5. skēu- + 1637															
1635-107	6. skēu-t- to cut + 794	1				5		?	9	10	11					5
1636-108	skēu- to throw, shoot											11	12			2
1637-109	skeub- to shoot, throw + 1639										10	11	12			3
1638-110	1. skeud- unwilling + 915					5						11				2
1639-111	2. (s)keud- to throw, shoot + 1637		1	2		5		7			10	11	12			7
1640-112	(s)keup- bunch										10		12			2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1641-113	(s)keut- to shrivel up										10	11				2
1642-114	sklêk- wet; to spray + 936										10	11				2
1643-115	skordho- pan, shard?										10	11	12			3
1644-116	skot- shadow					5				9	10					3
1645-117	(s)kūt- to shake + 1018										10	11	12			3
1646-118	(s)k ^u alo-s a rather large type of fish (IE?)								8		10	11				3
1647-119	skuerb(h)- to prick									9		11				2
1648-120	sk(h)uoi- thorn									9		11	12			3
1649-121	(s)lāg ^u - to seize, grasp					5					10					2
1650-122	slak- to hit, hammer									9	10					2
x	(s)leb- + 1637															
1651-123	(s)lēg- slack, sloppy	1				5			8	9	10	11	12	?		7
x	(s)leib- + 1657															
1652-124	slēg ^u - to press, maltreat					5						11				2
1653-125	(s)leidh- slippery, to slide + 1072		1			5			?	9	10	11	12			6
1654-126	(s)leig- to hit, hack								8	9	10					3
1655-127	sleuk- to wind, turn									9	10	11	12			4
1656-128	(s)leu- slack, hanging									9	10	11	12			4
x	sler- + 1663															
1657-129	sleub(h)- to slide + 1659								8		10					2
1658-130	(s)leug- to swallow + 1062					5				9	10	11	12			5
1659-131	(s)leuġ- to slide + 1657										10	11	12			3
1660-132	(s)leup- to hang down slackly										10	11				2
1661-133	(s)lī- bluish								8	9	10		12			4
1662-134	slougo- helping, serving									9		11	12			3
1663-135	(s)lġg- (onomat)					5			8		10	11				4
1664-136	sme- truly, certainly	1				5			8						14	4
1665-137	smē- to smear			3		5			8		10	11	12			6
1666-138	smeg(h)- to taste + 1173?										10	11				2
1667-139	1. (s)mei- to smile	1				5			8	9	10	11	12	13		8
1668-140	2. smēi- to carve					5					10	?				2
x	3. smēi- + 1665															
1669-141	smeit- to throw		2						8							2
1670-142	smek- chin, beard	1		3				7	?	9	10	11			14	7
1671-143	1. smel- to burn slowly with a lot of smoke										9	10	11	12		4
1672-144	2. smel- grey + 1196					5						11				2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1673-145	(s)mer- to think of	1	2	3		5			8	9	10	11	12			9
1674-146	smerd- to stink + 1229					5			8	?		11	12			4
1675-147	smeru- grease, fat					5			8	9	10					4
x	smeu- + 1667															
1676-148	(s)meukh- to smoke				3	5				9	10	11	12			6
1677-149	smog- heavy, burdensome					5						11				2
1678-150	snā- to flow + 462	1	2	3	4	5	6		8	9	10					9
1679-151	(s)nadh- to cut in									9	10					2
1680-152	(s)nē- to twist threads together + 1286															
		1				5			8	9	10	11	12			7
1681-153	(s)nēbh-ri- narrow, thin				3						10					2
x	sneig- + ?															
1682-154	sneig ^u h- to snow	1	2			5			8	9	10	11	12			8
1683-155	sneit- to cut									?	10		12			2
1684-156	(snēp-) to twist into a rope + 1286															
									8		10		12			3
1685-157	1. (s)ner- (onomat) to growl, snarl					5					10	11				3
1686-158	2. (s)ner- to turn + 1286	1	2	3		5					10	11	12			7
1687-159	(s)nerb- to cut? + 1686?					5					10					2
x	1. sneu- + 1678															
1688-160	2. snēu- to turn + 1286	1	2	3		5		7	8		10	11	12	13		10
1689-161	sneubh- to woo, marry + 1574?, 1692?					5			8				12			3
1690-162	1. sneud(h)- sleepy, to slumber + 1691					5						11				2
1691-163	2. sneud(h)- fog(gy) + 1690				2	5			8	9						4
1692-164	snusós daughter-in-law + 1574?, 1689?															
		1		3		5		?	8		10		12			6
1693-165	so(s) the, this + 1880	1	2			5		7	8	9	10			13		8
x	soi-to- + 1550															
1694-166	solo- well-kept, whole + 1565															
		1	2	3		5		7	8	9				13		8
1695-167	sō(u)ra calf (of leg)?					5			8							2
1696-168	spako- small drop					5						11				2
1697-169	sp(h)ē- (in words for) long, flat piece of wood + 1361					5					10				?	2
1698-170	speġ- to watch sharply + 1400											10		12		2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1699-171	1. (s)p(h)ēi- sharp, pointed piece of wood + 1431?	1		3		5			8		10	11	12	13		8
1700-172	2. sp(h)ei- to pull + 1361					5				9	10					3
1701-173	3. sp(h)ē(i)- to prosper + 1361			1	3	5			8	9	10	11	12		14	9
1702-174	spek- to spy, watch + 1400?			1	2		5	7	8		10					6
1703-175	(s)pel- loud, to speak with emphasis				3	5					10	11		13		5
1704-176	1. (s)p(h)el- to split (off) + 1439			1	2		5	7	8	9	10	11	12	13		10
1705-177	2. (s)p(h)el- to glitter	1		3		5			8	?	10	11				6
1706-178	(s)p(h)elg- to split + 1439			3		5			?	10	11					4
1707-179	sp(h)elgh(en)- milt, spleen			1	2	3	5		8	9			12			7
1708-180	1. (s)pen-(d-) to pull + 1361				3	5		?	8		10	11	12			6
1709-181	2. (*(s)pen-) wooden pail			3					8	9	10		12			5
1710-182	spend- to offer a drink					5			8						14	3
1711-183	sp(h)e(n)d- to quiver	1				5					10	11				4
1712-184	sp(h)eng- to glitter					?					10	11				2
1713-185	speno- nipple, breast	1	2	3		5				9	10	11				7
1714-186	1. (s)per- spar + 1400					5		7	8		10		12			5
1715-187	2. sper-(g-) name of bird esp. sparrow + 1400					5			8	9	10	11		13		6
1716-188	3. sper- to turn, wind			3		5			8			11				4
1717-189	4. (s)p(h)er- to rip; rag			3		5					10		?			3
1718-190	1. sp(h)er- to quiver + 1400			1	2	3	5		8	9	10	11				8
1719-191	2. (s)p(h)er- to strew, sow + 1400				3	5				9	10	11				5
1720-192	3. sp(h)er- (in words for) balls of goat or sheep's dung - hence pill + 1400					5					10	11				3
1721-193	sp(h)erd(h)- to quiver + 1718			1	2		5				10	11	12			6
1722-194	(s)p(h)ereg- to quiver + 1400			1	2		5	7	8	9	10	11	12			9
1723-195	spergh- to hurry + 1400			1	2		5			9	10					5
1724-196	(s)p(h)eu-d- to press + 1361	2				5		?			10	11				4

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1725-197	(s)pīko- woodpecker and similar large birds	1							8	10	11					4
1726-198	(s)pingo- sparrow, finch	1				5			8	10						4
1727-199	(s)p(h)iēu- to spit, spew	1	2	3		5			8	10	11	12				8
1728-200	(s)plei- to split + 1439									9	10	11				3
1729-201	(s)pleigh- to spread legs	1				5			9							3
1730-202	(s)poimno- foam, spray	1	2						8	10	11	12				6
x	sprei- + 1400															
1731-203	sp(h)reig- to overflow, teem + 1400					5				10						2
1732-204	sra ^u k- to- sharp-edged	1	2			5										3
1733-205	srebh- to sip, + 1818			3		5		7	8	9	10	11	12			8
1734-206	sr-edh- to spout + 1584					5				9	10					3
1735-207	(s)reigh- to clamber	1				5										2
1736-208	srenk- to snore			?		5			9							2
1737-209	srēno- name of part of the body, e.g. loins		2									11				2
1738-210	sresk- to drip? + 936		2	3								11				3
1739-211	sreu- to flow + 1584	1	2	3	4	5				9	10	11	12			9
1740-212	sreup- scurfy dirt on body					5							12			2
1741-213	srīg- cold, frost					5			8			?				2
1742-214	srōmo- lame		1										12			2
1743-215	stā- to stand + 1747, 1748	1	2	3		5	6	7	8	9	10	11	12	13		12
1744-216	stag- to trickle					5			8	9						3
1745-217	(s)tāi- to do sth. secretly, steal + 1753, 1775		1	2		5				9			12		14	6
1746-218	stāi- to condense + 1745	1	2			5			8	10	11	12				7
1747-219	stāk- to stand + 1743		1	2					8	10	11					5
1748-220	steb(h)- post + 1743		1	2		5				9	10	11	12			7
1749-221	1. (s)teg- to cover, roof, house		1			5			8	9	10	11	12			7
1750-222	2. (s)teg- pole, stake + 1754, 1756				3				8	10	11	12				5
1751-223	stegh- stick, stalk					5				10	11	12				4
1752-224	(s)tei- pointed + 1750		?	2					8	?						2
1753-225	stēib(h)- stake + 1746		1	3		5			8	10	11	12				7
1754-226	(s)teig- to prick + 1750		1	2		5			8	9	10	11				7
1755-227	steigh- to stride, climb		1			5		7		9	10	11	12			7
1756-228	(s)teig ^u - shoulder, arm, thigh + 1750				3					9			12			3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1757-229	(s)teigh- to endure	1									10	11				3
1758-230	1. (s)tel- to let flow, urinate				?	5				?	10	11	12			4
1759-231	2. stel- to stretch out, broad + 1760, 1843?				3				8			11	12			4
1760-232	3. stel- to place + 1759, 1843?	1		3		5		7	8	9	10	11	12			9
1761-233	stem- to push, thrust										10	11				2
1762-234	1. (s)ten- (in words for) loud noises; to thunder, rush, drone	1	2			5			8	9	10	11	12			8
1763-235	2. sten- narrow, to hem in					5					10	11				3
1764-236	1. (s)ter- stiff, rigid + 1769, 1770, 1782, 1887						5	7	8	9	10	11	12			7
1765-237	2. stēr- star	1	2	3		5			8	9	10					7
1766-238	3. ster- to rob, steal					5				9	10					3
1767-239	4. ster- strip; beam					5				9	10	11	12			5
1768-240	5. ster- to spread out	1	2			5		7	8	9	10	11	12			9
1769-241	6. ster- unfruitful, barren + 1764	1		3		5		7	8		10		12			7
1770-242	7. (s)ter-n- (in words for) prickly plants + 1764	1				5					10		12			4
1771-243	8. (s)ter- (in words for) unclear liquid; dung		2	3		5			8	9	10	11	12			8
1772-244	sterg- to pay careful attention to					5				9			12			3
1773-245	1. (s)teu- to thrust, hit + 1912	1				5		7	8	9	10	11	12			8
1774-246	2. steu- to praise aloud	1	2			5										3
1775-247	steu- to become thick, coagulate + 1746	1				5						11	12			4
1776-248	stilp- to shine, look					5				9						2
1777-249	stomen- mouth			2		5				9						3
1778-250	storos starlings and birds with similar songs									8	10	11	?			3
1779-251	1. streig- to stop								8		10	11	12			4
1780-252	2. streig- stiff + 1764								8		10					2
1781-253	3. (s)treig- to hiss + 1783					5			8					13		3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1782-254	strenk- tense, tight															
	+ 1764					5				9	10	11				4
1783-255	(s)trep- to make wild noises + 1781								8		10					2
1784-256	stru- old (man)									9		11	12			3
1785-257	su- good, well + 1542	1	2			5				9	10	11	12			7
1786-258	sū-s domestic pig, sow															
	+ 1592	1	2			5		7	8	9	10	11	12	13		10
1787-259	sū-ro- sour, salty, bitter															
	+ 1591									9	10	11	12	?		4
1788-260	1. sūs- (onomat) to whistle (of wind)										10	11	12			3
1789-261	2. sūs- creator, producer															
	+ 1592	1						7								2
1790-262	suād- sweet	1	2			5			8	9	10	11				7
1791-263	suārd- to laugh?					5			9							2
1792-264	suēi- to whistle, pipe	1	?			5			8	9	10		12			6
1793-265	suē(i)- to bend, turn															
	+ 1593		2			5				9	10	11		13		6
1794-266	1. suēid- to glisten															
	+ 1796		2						8	?	11					3
1795-267	2. suēid- to sweat	1	2	3		5		7	8	9	10	11				9
1796-268	suēid- milk + 1794	1	2								?					2
1797-269	suēk- to smell (good)									9	10					2
1798-270	suēkrū- husband's mother	1	2	3		5		7	8	9	10	11	12			10
1799-271	suēks- six	1	2	3		5	6	7	8	9	10	11	12	13		12
1800-272	s(u)ek ^u o-s sap, resin					5		7				11	12			4
1801-273	1. suēl-(k-) to swallow greedily				2						10					2
1802-274	2. suēl- to smoulder															
	+ 1541	1	?			5					10	11				4
1803-275	3. (suēl-) sole of foot					5			8	9						3
x	su ^u el- + 1561															
1804-276	suē-lo- brother-in-law															
	+ 1542					5					10					2
1805-277	suēlplo-s sulphur + 1541								8		10					2
1806-278	suēm- to set in motion									9	10					2
1807-279	suēin- to (re)sound	1	2						8	9	10	?				5
1808-280	(s)uēndh- to dwindle?															
	+ 1821, 1987									?	10		12			2

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1809-281	sɯeng- to bend, swing + 1593										9	10				4
1810-282	sɯenk- to be heavy, pregnant											10	11			2
1811-283	sɯento- active, healthy										10					1
1812-284	1. sɯep- to sleep	1	2	3		5		7	8	9	10	11	12	13	14	12
1813-285	2. sɯep- to throw	1							8		10		12			4
1814-286	1. sɯer- to speak + 1815								8		10		12			3
1815-287	2. sɯer- to buzz + 1814	1				5			8	9	10	11	12			7
1816-288	3. sɯer- stake	1				5			8		10					4
1817-289	4. sɯer- to cut, prick		2							9	10		12			4
x	5. sɯer- + 1992															
1818-290	sɯerbh- to turn					?				9	10	?	12			3
1819-291	sɯergh- to care, trouble	1						7		9	10	11	12			6
1820-292	sɯesor- sister	1	2	3		5			8	9	10	11	12	13		10
1821-293	sɯi- to dwindle + 1808					5					10					2
1822-294	sɯomb(h)o-s spongy					5					10					2
1823-295	sɯordo-s black, dirty • colours								8		10					2

Totals for S - 295

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	133	96	63	5	193	14	46	141	141	220	171	140	28	19	= 1410
% of 295	45	33	21	2	65	5	16	48	48	75	58	47	9	6	
Rank	7	8	9	14	2	13	10	4-	4-	1	3	6	11	12	

T

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1824-1	tā- to melt		2	3	4	5	6		8	9	10	11	12			10
1825-2	tād- to act (cautiously)					5			8							2
1826-3	tag- to touch, seize				?	5			8	9	10					4
1827-4	tāg- to put (tidily)					5				9		11		13		4
1828-5	tak- to be silent								8	9	10					3
1829-6	tāl- to turn green					5			8			11				3
1830-7	1. tap- to dip in			3									12			2
1831-8	2. tap- to press down together						5				10	11				3
1832-9	tata- daddy	1				5		7	8	9	10	11	12			8
1833-10	taus- calm, silent	1	2							9	10	11	12		14	7

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
x	teg- + 1749															
1834-11	teg- to burn					5					10					2
1835-12	tegu- fat, thick									9	10					2
x	tei- + 1752															
x	teig- + 1754															
x	teig ^u - + 1756															
1836-13	1. tek- to bear, produce	1				5					10					3
1837-14	2. tek- to stretch out the hand for ...										9	10	11	12		4
1838-15	3. tek- to weave, plait		2	3							10		?			3
1839-16	tek ^u - to plait	1	2			5			8	9	10	11	12		14	9
1840-17	tek ^u - to run, flow	1	2					7		9	10	11	12	13	14	9
1841-18	1. tel- to lift up, weigh, balance		1	3		5	6		8	9	10	11	12	13		10
1842-19	2. tel- flat (ground or board		1	3		5			8	9	10	11	12			8
1843-20	3. tel- to be still, calm + 1759?, 1760?									9		11	12			3
x	4. tel- + 1758															
1844-21	telegh- to hit? + 1845	1										11				2
1845-22	telek- to push + 1844									9		11	12			3
1846-23	telp- to have room	1								9		11	12	13		5
1847-24	1. tem- to cut					5			8	9		11	12			5
1848-25	2. tem- stunned	1	3						8	9	10		12			6
1849-26	tem(ə)- dark	1	2			5	6		8	9	10	11	12	13		10
1850-27	temp- to stretch + 1851, 1854, 1855, 1856, 1857		2	3					8		10	11	12	13		7
1851-28	1. ten- to stretch + 1850	1	2			5		7	8	9	10	11	12			9
x	2. ten- + 1762															
x	tend- + 1847															
1852-29	tenəgos- bottom of the water					5						11				2
1853-30	1. teng- to wet					5			8		10					3
x	2. teng- + 1882															
1854-31	tengh- to pull + 1850		2	3					8		10	11	12	13		7
1855-32	1. tenk- to pull + 1850										10					1
1856-33	2. tenk- to contract + 1850	1	2						9	10	11	12				6
1857-34	tens- to stretch + 1850	1	2						8		10	11				5
1858-35	tenu-s thin	1	2			5			8	9	10	11	12			8
1859-36	tep- to be warm	1	2					7	8	9	10		12		14	8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1860-37	1. ter- to quiver + 1891, 1894, 1896			1				7								2
1861-38	2. ter- tender, weak	1	2	3		5		7	8		10					7
1862-39	3. ter- to rub, bore + 386	1				5		7	8	9	10	11	12	13		9
1863-40	4. ter- to get over + 1864 1871, 1884, 1901	1	2	3		5	6	7	8	9	10				14	10
1864-41	5. ter- through + 1863	1	2					8	9	10						5
1865-42	6. ter- (in words for) gnawing and boring insects + 386					5		8	9							3
1866-43	terd- to bore through + 386			1						?		11	12			3
1867-44	terg ^u - to threaten + 386	1				5		8	9	?						4
1868-45	terk- to turn + 386	1				5		8	9	10	11	12	13			8
1869-46	terp- to satisfy o.s., enjoy	1	2			5				?		11		13		5
1870-47	ters- to dry; thirst	1	2	3		5		7	8	9	10					8
1871-48	tet(e)r- to chatter (of geese etc) + 1863	1	2	3		5		8	9	10	11	12				9
x	1. teu- + 1773															
1872-49	2. teu- to notice (in a friendly way)						?		8	9	10					3
1873-50	tēu- to swell + 1874	1	2	3	4	5	6	7	8	9	10	11	12	13	14	14
1874-51	teuk- germ, sprout, seed + 1873		1	2							10					3
1875-52	teup- to crouch down					5					10	11				3
1876-53	teus- to empty	1	2					8			10		12			5
1877-54	teu ² - to sift, riddle	1				5										2
1878-55	ti-ti (onomat) for the singing of small birds	1				5		8			11					4
1879-56	tjēg ^u - shy; to step back	1	2			5										3
1880-57	1. to- the + 1693	1	2	3		5		7	8	9	10	11	12	13		11
x	2. to- + 117 and 212															
1881-58	tolk ^u - to talk, reveal							8	9			12				3
1882-59	1. tong- to think, feel							7	8		10			13		4
x	2. tong- + 1826															
1883-60	top- to reach somewhere					5				?	?	11				2
1884-61	tor- loud, audible + 1863	1		3		5				9		11	12		14	7
1885-62	trāgh- to pull + 386									8	9	10		12		4
1886-63	trēb- beam structure, building					5				8	9	10	11			5

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1887-64	treg- to bring all one's strength to bear + 1764									9	10	11	12			4
1888-65	trei- three	1	2	3		5	6	7	8	9	10	11	12	13	14	13
1889-66	treisti- sulky								8	10						2
1890-67	trek- to pull + 386		?							9			12			2
1891-68	trem- to trip, patter + 1860					5		7	8		10	11	12	13		7
1892-69	1. trenk- to thrust, press together + 1893		2						8	9	10	11	12			6
1893-70	2. trenk- to wash + 1892								9		?					1
1894-71	1. trep- to trip, trample + 1860	1	2			5		7	8		10	11	12			8
1895-72	2. trep- to turn (away in shame) + 1862	1				5			8							3
1896-73	tres- to quiver + 1860	1	2	?		5			8	9		11				6
1897-74	trēu- to prosper		2								10					2
1898-75	tr-eu-d- to squash + 386							7	8	9	10		12			5
1899-76	trīto- wet element?					5				9						2
1900-77	tris- plant stem, vine					5		7					12			3
1901-78	trozdos- thrush + 1863								8	9	10	11	12			5
1902-79	trūdes- leprosy + 386									9	10					2
x	truk- + 1915															
1903-80	trus- reed?					5						11	12			3
1904-81	tu, tutu bird-cry	1				5			8		10	11				5
1905-82	tū thou, you	1	2	3		5		7	8	9	10	11	12	13	14	12
1906-83	tū-lo- slow and boring in work, speech etc										10	11				2
1907-84	1. tṽak- to embrace, bind					5										2
1908-85	2. tṽak- to bathe										10	11				2
1909-86	tṽakos- skin	1				5									14	3
1910-87	1. tṽei- to hew sharply, hit?										10	11				2
1911-88	2. tṽēi- to move hither and thither, shake	1	2			5										3
x	tṽen- + 1873															
1912-89	tṽēṅh- to close in, press on s.o. + 1773		2								10					2
1913-90	1. tṽer- to turn, twirl	1	2			5			8	9	10					6
1914-91	2. tṽer- to hold, grasp					5				?		11	12			3
1915-92	tṽerḱ- to cut	1	2			5			?	?						3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1916-93	tuībh- hollow like a pipe					5			8							2
1917-94	tuō(u)- pipe	1				5							12			3
Totals for T - 94																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		47	34	17	2	54	6	18	50	49	59	50	44	16	10	= 456
% of 94		50	36	18	2	57	6	19	53	52	63	53	47	17	10	
Rank		6	8	10	14	2	13	9	3-	5	1	3-	7	11	12	

U

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1918-1	1. u- (onomat) in imita- tion of owls etc										9	10	11	12		4
1919-2	ub- to press (down)	1	2									11				3
1920-3	ūd- up(wards) + 603	1	2			5			8	9	10	11	12			8
1921-4	udero- belly	1	2			5			8		10	11				6
1922-5	ul- (onomat) howl + 56	1				5			8	9		11				5
1923-6	upér- over, above + 1924	1	2			5			8	9	10					6
1924-7	upo- below + 1923	1	2			5			8	9	10		12		14	8

Totals for U - 7

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
		6	5	0	0	5	0	0	5	5	5	5	3	0	1	= 40
% of 7		86	71	0	0	71	0	0	71	71	71	71	43	0	14	
Rank		1	2-	10-	10-	2-	10-	10-	2-	2-	2-	2-	8	10-	9	

U

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1925-1	1. uā- to hit				3	5				9	10	11				5
1926-2	2. uā- apart + 123	?							8							1
1927-3	uab- to call, cry + 1938, 1939										10		12			2
1928-4	uadh- pledge								8		10	11				3
1929-5	uādh- to go, stride				3				8		10					3
1930-6	1. uāg- hollow lid, sheath					?			8			11		?		2
1931-7	2. uāg- to cry, shriek + 1932				1				8			11				3
1932-8	uagh- to shriek + 1931						5				?	?				1
1933-9	uai- woe; wolf		2	3			5		7	8	9	10	11	?		8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1934-10	uāi- weak, miserable	1								9	10	11				4
1935-11	uākā cow?	1							8							2
1936-12	ual- to be strong								8	9	10	11	12	13		6
1937-13	uank- beam	1								9						2
1938-14	1. uap- to chatter + 1927										10	11				2
1939-15	2. uap- to call + 1927		2				?		?				12			2
x	uasto-s- + 509															
1940-16	1. uāt- better; to be spiritually (intellect- ually) animated									8	9	10				3
1941-17	uāt- to crook, bend + 123								8		10					2
1942-18	uazd- wide, long								8	9						2
1943-19	1. uē- we + 1284		1	2							10	11	12	13	14	7
x	2. ue- + 123															
x	3. uē- + 128															
x	4. ue- + 121															
x	5. ue- + 122															
1944-20	uebh- to weave; move back and forth + 123		1	2			5		7		10	11		13		7
x	ued- + 1946															
1945-21	1. uedh- to hit		1	2			5			9		11				5
1946-22	2. uedh- to lead		1	2			5		?	9	10	11	12			7
1947-23	3. uedh- to tie + 1985		1				5			9	10				14	5
1948-24	ueg- to weave + 2035		1							8	9	10				4
1949-25	ueg- to be strong + 130		1	2						8		10		13		5
1950-26	ueg ^u - to dampen		1	2			5			8	9	10		13		7
1951-27	uegh- to move		1	2			5		7	8	9	10	11	12		9
1952-28	uæg- to be curved, bent + 123										8	9				2
1953-29	1. uei- to turn, + 123		1	2			5		7	8	9	10	11	12		9
1954-30	2. uei- to wither + 1967									8	9	10	11			4
1955-31	3. uei- to let fly at, go for + 2028		1	2			5			8	9	10	11	12		8
x	ueib- + 1905															
1956-32	1. ueid- to turn + 123		1				5			8		11				4
1957-33	2. ueid- to catch sight of, see			1	2	3		5		8	9	10	11	12		9
1958-34	ueidh- to separate (= 2025 + 359?)			1	2			5		8	9	10	11	12		8
1959-35	1. ueik- to sort out + 123		1							8		10				3

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
1960-36	2. <u>ueik-</u> strong, inimicable force								8	9	10	11	12			5
1961-37	3. <u>ueik-</u> to happen, prove right?					5						11				2
1962-38	4. <u>ueik-</u> to bend + 123	1	2			5			8		10	11	12			7
1963-39	<u>ueik-</u> house	1	2			5			8		10	11	12			7
1964-40	<u>ueip-</u> to turn + 1593	1	2			5			8	9	10	11				7
1965-41	1. <u>ueis-</u> to sprout								8		10	11				3
1966-42	2. <u>ueis-</u> to turn + 123	1		3		?			8		10	11	12			6
1967-43	3. <u>ueis-</u> to flow (away) + 1994		1	2	3		5		8	9	10	11	12			9
1968-44	<u>uek-</u> to bend + 123		1	2	3				8	9	10	11				7
1969-45	<u>uek-</u> to be bent + 123								8	9						2
1970-46	<u>uek-</u> to want, wish	1	2	?		5									14	4
1971-47	<u>uek^u-</u> to speak	1	2	3		5			8	9	10	11		13	14	10
1972-48	<u>uek-ti-</u> thing										10		12			2
1973-49	1. <u>uel-</u> to see								8	9	10					3
1974-50	2. <u>uel-</u> to want, choose + 1977		1	2	3		5	6	8	9	10	11	12			10
1975-51	3. <u>uel-</u> to press, crowd	1				5			8	9		11	12	13		7
1976-52	4. <u>uel-</u> (in words for) hair and wool + 1979 or 1980		1	2		5			8	9	10	11	12			8
1977-53	5. <u>uel-</u> to deceive + 1974					?			9		11					2
1978-54	6. <u>uel-</u> warm? + 1975			3							11					2
1979-55	7. <u>uel-</u> to turn + 1975	1	2	3		5		7	8	9	10	11	12	13		11
1980-56	8. <u>uel-</u> to tear + 1567					5			9	10	11	12			14	6
1981-57	1. <u>uelk-</u> to pull + 1567		2			5					11	12				4
1982-58	2. <u>uelk-</u> damp						6		9	10	11	12				5
1983-59	<u>uem-</u> to spew, vomit	1	2			5			8		10	11				6
1984-60	1. <u>uen-</u> to strive	1	2				6		8	9	10		12	13	14	9
x	2. <u>uen-</u> + 1925															
1985-61	1. <u>uendh-</u> to turn + 1947	1		3		5					10					4
1986-62	2. <u>uendh-</u> to wane + 1808												12			1
1987-63	<u>uendh-</u> hair, beard					5			9	10	11	12				5
1988-64	<u>ue-n-g-</u> to be bent + 123	1						7			10	11				4
1989-65	<u>ue-n-gh-</u> to be bent + 123										10					1
x	<u>ue-n-k-</u> + 123															
1990-66	1. <u>uep-</u> water + 89	1					6		9		11	12			14	6
1991-67	2. <u>uep-</u> to throw, strew	1	2						?		11	12				4

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
x	uerp- + 128															
1992-68	1. uer- to tie + 1994, 1996, 2006, 2036	1				5		7	?	9	10	11	12	13		8
1993-69	2. uer- raised place	1	2			?			8	9	10	11	12	?		7
1994-70	3. uer- to turn, + 1992	1	2			5	6	7	8	9	10	11	12	13		11
1995-71	4. uer- to find, take			3		5				9		11	12			5
1996-72	5. uer- to shut + 1992	1	2			5		7	8	9	10	11	12	13		10
1997-73	6. uer- to speak formally	1	2			5			8		10	11	12		14	8
1998-74	7. uer- to tear up, open	1	2	3		5		7	8		10	11	12			9
1999-75	8. uer- to notice					5			8	9	10	11		13		6
2000-76	9. uer- wide	1	2			5								?		3
x	10. uer- + 127															
2001-77	11. uer- to show friend- liness					5			8	9	10		12			5
2002-78	12. uer- to burn			3				?			10	11	12			4
2003-79	13. uer- squirrel, weasel	2							8	9	10	11	12			6
2004-80	u(e)rād- twig, branch					5		7	8	9	10			13		6
2005-81	uerdh- to grow	1	2			5		7		?	11	12				6
2006-82	1. uerg- to shut off (or in) + 1992	1	2			5				9						4
2007-83	2. uerg- to be effective, do		2	3		5		7		9	10					6
2008-84	3. uerg- to swarm; swell	1				5				9						3
x	uerg- + 1992															
2009-85	uer-(e)na alder, poplar			3				7		9						3
2010-86	uers- to trail on the ground					?			8		10	11	12		14	5
2011-87	ueren- ram, sheep, lamb	1	2	3		5		8								5
2012-88	1. ues- to tarry, live, stay overnight + 120	1	2	3		5	6		8	9	10			13	14	10
2013-89	2. ues- to feast + 2021	1	2					?	9	10					14	5
2014-90	3. ues- to dampen; wet	1	2			5			8	10						5
2015-91	4. ues- to stick, stab	1						7	9	10	11	?				5
2016-92	5. ues- to clothe	1	2	3		5		7	8	10				13	14	9
x	6. ues- + 767															
2017-93	7. ues- to turn, wrap, + 123	1									10					2
2018-94	8. ues- to buy, sell	1		3		5			8				12		14	6
x	9. ues- + 132															
2019-95	uesperos evening					5			8	9	10	11	12			6
2020-96	ues-rō spring + 132	1	2	3		5			8	9	?	11	12			8

Number	Root and Translation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Set
2021-97	u ^ě su- good + 2013	1	2			?	6			9	10	11	12	13		8
2022-98	u ^e t- year	1	2	3		5	6	7	8	9	10	11	12		14	12
2023-99	1. u ⁱ - apart, in two + 1958	1	2			5			8		10	11	12			7
2024-100	2. u ⁱ - (onomat)					5			8		10	11	12			5
2025-101	u ⁱ dhu- tree									9	10					2
2026-102	u ⁱ -k ^{mt} -I twenty (= 2024 + 311)	1	2	3		5		7	8	9				13		8
2027-103	u ⁱ ng- elm + 77		2					7			10	11	12			5
2028-104	u ⁱ ro-s man + 1955	1	2						8	9	10	11		13		7
2029-105	u ⁱ eth- to shake	1									10					2
2030-106	u ^l ek to light, shine	1												13		2
2031-107	u ^l k ^u os wolf	1	2			5	6	7	8	9	10	11	12			10
2032-108	u ^l p- (in words for) animals of prey, especially in the dog family															
			2	3		5			8			11				5
2033-109	u ^o bhsā wasp + 123		2						8	9	10	11	12			6
2034-110	u ^o g ^u hni-s ploughshare					5			8		10	11				4
2035-111	u ^o kso- wax + 1948										10	11	12			3
2036-112	u ^o ro- dizziness, madness + 1992					5					10					2
2037-113	u ^o rtoko- quail	1				5										2
2038-114	1. u ^r āgh- thorn					5				9		11				3
2039-115	2. u ^r āgh- to hit?					5										1
2040-116	u ^r eg- to thrust	1							8		10	11	12			5
2041-117	u ^r ēg- to break			3		5		?				11	12			4
2042-118	u ^r en- to splash?					5									?	1
2043-119	(u ^r eth-) to support			?							10					1
2044-120	u ^r ughio- rye					4					10	11	12			4

Totals for U - 120

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	66	52	26	1	64	9	20	67	62	82	73	54	20	14	= 610
% of 120	55	43	21	1	55	7	17	55	51	68	60	45	17	12	
Rank	4	8	9	14	5	13	10-	3	6	1	2	7	10-	12	

T A B L E T W O

The Sets and Their Distribution

List 1.

Sets Containing 14 Occurrences

Maximum Number of Sets of this Type: 1

Number of Sets of this Type Occurring: 1

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1	1873
	Total Number of Items	1	

List 2.

Sets Containing 13 Occurrences

Maximum Number of Sets of this Type: 14

Number of Sets of this Type Occurring: 4

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 6 7 8 9 10 11 12 13 14	2	212, 458
2.	1 2 3 4 5 6 x 8 9 10 11 12 13 14	1	359
3.	1 2 3 4 5 x 7 8 9 10 11 12 13 14	1	127
4.	1 2 3 x 5 6 7 8 9 10 11 12 13 14	4	498, 1162, 1625, 1888
	Total Number of Items	8	

List 3.

Sets Containing 12 Occurrences

Maximum Number of Sets of this Type: 91

Number of Sets of this Type Occurring: 11

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 6 7 8 9 10 11 12 x x	3	232, 547, 732
2.	1 2 3 4 5 6 x 8 9 10 11 12 13 x	1	271
3.	1 2 3 4 5 x 7 8 9 10 11 12 13 x	4	305, 465, 1159, 1330

No.	Pattern	Occur- rences	Item Serial Numbers
4.	1 2 3 4 5 x 7 8 9 10 11 12 x 14	1	479
5.	1 2 3 4 5 x 7 x 9 10 11 12 13 14	1	333
6.	1 2 3 x 5 6 7 8 9 10 11 12 13 x	3	44, 1743, 1799
7.	1 2 3 x 5 6 7 8 9 10 11 12 x 14	3	612, 1401, 2022
8.	1 2 3 x 5 6 x 8 9 10 11 12 13 14	1	1128
9.	1 2 3 x 5 x 7 8 9 10 11 12 13 14	9	468, 767, 1191, 1213, 1372, 1398, 1583, 1812, 1905
10.	1 2 x 4 5 x 7 8 9 10 11 12 13 14	1	600
11.	1 x 3 4 5 6 7 8 9 10 11 12 13 x	1	1534
Total Number of Items		28	

List 4.

Sets Containing 11 Occurrences

Maximum Number of Sets of this Type: 364

Number of Sets of this Type Occurring: 14

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 x 7 8 9 10 11 12 x x	1	422
2.	1 2 3 4 5 x x 8 9 10 11 12 13 x	1	367
3.	1 2 3 4 5 x x 8 9 10 11 12 x 14	1	562
4.	1 2 3 4 x 6 x 8 9 10 x 12 13 14	1	222
5.	1 2 3 x 5 6 7 8 9 10 11 12 x x	2	364, 473
6.	1 2 3 x 5 6 x 8 9 10 11 12 13 x	4	327, 940, 1442, 1488
7.	1 2 3 x 5 6 x 8 9 x 11 12 13 14	1	603
8.	1 2 3 x 5 6 x 8 x 10 11 12 13 14	1	429
9.	1 2 3 x 5 x 7 8 9 10 11 12 13 x	12	64, 311, 352, 396, 418, 451, 548, 1223, 1332, 1384, 1880, 1979
10.	1 2 3 x 5 x 7 8 9 10 11 12 x 14	4	730, 1041, 1138, 1392
11.	1 2 3 x 5 x 7 8 x 10 11 12 13 14	1	489
12.	1 2 3 x 5 x x 8 9 10 11 12 13 14	4	435, 757, 1283, 1313
13.	1 2 x x 5 6 7 8 9 10 11 12 13 x	2	1591, 1994
14.	1 x 3 4 5 x 7 8 9 10 11 12 x 14	1	1610
Total Number of Items		36	

List 5.

Sets Containing 10 Occurrences

Maximum Number of Sets of this Type: 1001

Number of Sets of this Type Occurring: 37

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 6 x x 9 10 11 12 x x	1	326
2.	1 2 3 4 5 x 7 8 9 10 11 x x x	1	1334
3.	1 2 3 4 5 x 7 8 x 10 11 12 x x	1	94
4.	1 2 3 4 5 x x 8 9 10 11 12 x x	1	445
5.	1 2 3 4 5 x x 8 9 10 11 x 13 x	1	1020
6.	1 2 3 4 x x 7 8 9 10 11 12 x x	1	712
7.	1 2 3 x 5 6 7 8 9 10 x x x 14	1	1863
8.	1 2 3 x 5 6 7 8 x x 11 12 x 14	1	345
9.	1 2 3 x 5 6 7 x 9 10 11 12 x x	1	884
10.	1 2 3 x 5 6 x 8 9 10 11 12 x x	4	79, 1070, 1171, 1974
11.	1 2 3 x 5 6 x 8 9 10 x 12 x 14	1	462
12.	1 2 3 x 5 6 x 8 9 10 x x 13 14	2	297, 2012
13.	1 2 3 x 5 x 7 8 9 10 11 12 x x	12	158, 214, 695, 885, 910, 1045, 1302, 1385, 1387, 1390, 1471, 1798
14.	1 2 3 x 5 x 7 8 9 10 x 12 13 x	1	71
15.	1 2 3 x 5 x 7 8 9 10 x x 13 14	1	1174
16.	1 2 3 x 5 x 7 8 x 10 11 12 13 x	1	1688
17.	1 2 3 x 5 x 7 x 9 10 11 12 13 x	1	694
18.	1 2 3 x 5 x x 8 9 10 11 12 13 x	9	10, 81, 96, 317, 686, 711, 1040, 1571, 1820,
19.	1 2 3 x 5 x x 8 9 10 11 12 x 14	5	424, 463, 828, 1230, 1314
20.	1 2 3 x 5 x x 8 9 10 11 x 13 14	1	1971
21.	1 2 3 x 5 6 7 8 x 10 11 12 x x	1	1542
22.	1 2 x 4 5 6 x 8 9 10 11 x 13 x	1	444
23.	1 2 x 4 5 x 7 8 9 10 11 12 x x	2	26, 617
24.	1 2 x 4 5 x 7 x x 10 11 12 13 14	1	641
25.	1 2 x x 5 6 7 8 9 10 11 12 x x	2	117, 2031
26.	1 2 x x 5 6 x 8 9 10 11 12 13 x	1	1849
27.	1 2 x x 5 6 x 8 9 10 11 12 x 14	1	121
28.	1 2 x x 5 x 7 8 9 10 11 12 13 x	8	122, 1031, 1166, 1201, 1623, 1704, 1786, 1996
29.	1 2 x x 5 x 7 8 9 10 11 12 x 14	1	1284
30.	1 2 x x 5 x 7 8 x 10 11 12 13 14	2	1085, 1456

No.	Pattern	Occur- rences	Item Serial Numbers
31.	1 2 x x 5 x x 8 9 10 11 12 13 14	1	128
32.	1 x 3 4 5 x 7 8 9 10 11 12 x x	1	227
33.	1 x 3 x 5 6 7 8 9 10 11 12 x x	1	197
34.	1 x 3 x 5 6 x 8 9 10 11 12 13 x	1	1841
35.	1 x 3 x 5 x 7 8 9 10 11 12 13 x	2	314, 1210
36.	1 x x x 5 x 7 8 9 10 11 12 13 14	2	1116, 1298
37.	x 2 3 4 5 6 x 8 9 10 11 12 x x	1	1824
Total Number of Items		76	

List 6.

Sets Containing 9 Occurrences

Maximum Number of Sets of this Type: 2002

Number of Sets of this Type Occurring: 43

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 6 x 8 9 10 x x x x	1	1678
2.	1 2 3 4 5 x x 8 9 10 11 x x x	1	650
3.	1 2 3 4 5 x x x 9 10 11 12 x x	1	1739
4.	1 2 3 x 5 6 x 8 x 10 x x 13 14	1	552
5.	1 2 3 x 5 x 7 8 9 10 11 x x x	2	1125, 1795
6.	1 2 3 x 5 x 7 8 9 x 11 12 x x	1	1451
7.	1 2 3 x 5 x 7 8 x 10 11 12 x x	4	162, 827, 1605, 1998
8.	1 2 3 x 5 x 7 8 x 10 11 x 13 x	1	679
9.	1 2 3 x 5 x 7 8 x 10 x x 13 14	1	2016
10.	1 2 3 x 5 x 7 x 9 10 x 12 13 x	1	168
11.	1 2 3 x 5 x x 8 9 10 11 12 x x	18	77, 559, 829, 880, 931, 1082, 1084, 1182, 1229, 1241, 1437, 1543, 1607, 1633, 1673, 1871, 1957, 1967
12.	1 2 3 x 5 x x 8 9 10 11 x 13 x	1	125
13.	1 2 3 x 5 x x 8 9 10 11 x x 14	1	1420
14.	1 2 3 x 5 x x 8 9 10 x 12 13 x	1	49
15.	1 2 3 x 5 x x 8 9 10 x 12 x 14	2	337, 1025
16.	1 2 3 x 5 x x 8 x 10 11 12 13 x	2	415, 1183
17.	1 2 3 x 5 x x x 9 10 11 12 13 x	1	1592

No.	Pattern	Occur- rences	Item Serial Numbers
18.	1 2 3 x x 6 x 8 9 10 11 x 13 x	1	1411
19.	1 2 3 x x x x 8 9 10 11 12 13 x	1	344
20.	1 2 x 4 5 6 7 8 9 10 x x x x	1	213
21.	1 2 x 4 5 6 x 8 9 x 11 12 x x	1	1584
22.	1 2 x 4 5 x 7 8 9 10 11 x x x	1	210
23.	1 2 x 4 5 x x 8 9 10 11 12 x x	1	382
24.	1 2 x 4 5 x x 8 9 10 11 x 13 x	1	553
25.	1 2 x 4 5 x x x 9 10 11 12 13 x	1	290
26.	1 2 x x 5 6 x 8 9 10 11 12 x x	1	442
27.	1 2 x x 5 x 7 8 9 10 11 12 x x	12	536, 698, 909, 1122, 1301, 1541, 1624, 1722, 1768, 1851, 1951, 1953
28.	1 2 x x 5 x 7 8 9 x 11 12 13 x	1	363
29.	1 2 x x 5 x x 8 9 10 11 12 13 x	3	216, 696, 1519
30.	1 2 x x 5 x x 8 9 10 11 12 x 14	4	302, 316, 1550, 1839
31.	1 2 x x 5 x x 8 x 10 11 12 13 14	1	1317
32.	1 2 x x x 6 x 8 9 10 x 12 13 14	1	1984
33.	1 2 x x x x 7 8 9 10 11 12 x 14	1	1355
34.	1 2 x x x x 7 x 9 10 11 12 13 14	1	1840
35.	1 x 3 x 5 x 7 8 9 10 11 12 x x	3	556, 1432, 1760
36.	1 x 3 x 5 x x 8 9 10 11 12 x 14	2	893, 1701
37.	1 x 3 x 5 x x 8 9 10 11 x 13 14	1	86
38.	1 x x x 5 x 7 8 9 10 11 12 13 x	1	1862
39.	x 2 3 x 5 x 7 8 9 10 11 12 x x	1	1356
40.	x 2 x x 5 6 7 8 9 10 11 12 x x	1	1621
41.	x x 3 4 5 x x 8 9 10 11 12 x 14	1	946
42.	x x 3 x 5 6 7 8 9 10 11 12 x x	1	1350
43.	x x x x 5 x 7 8 9 10 11 12 13 14	1	1067
Total Number of Items		85	

List 7.

Sets Containing 8 Occurrences

Maximum Number of Sets of this Type:	3003
Number of Sets of this Type Occurring:	62

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 x x 8 9 10 x x x x	1	199
2.	1 2 3 4 5 x x 8 9 x x x 13 x	1	105
3.	1 2 3 x 5 x 7 8 9 10 x x x x	3	644, 1139, 1870
4.	1 2 3 x 5 x 7 8 9 x x x 13 x	2	1694, 2026
5.	1 2 3 x 5 x 7 8 9 x x x x 14	1	1351
6.	1 2 3 x 5 x 7 8 x 10 11 x x x	1	1383
7.	1 2 3 x 5 x 7 8 x 10 x 12 x x	1	1272
8.	1 2 3 x 5 x 7 x 9 10 x x 13 x	1	73
9.	1 2 3 x 5 x x 8 9 10 11 x x x	4	509, 1281, 1472, 1718
10.	1 2 3 x 5 x x 8 9 10 x 12 x x	1	350
11.	1 2 3 x 5 x x 8 9 10 x x 13 x	1	1427
12.	1 2 3 x 5 x x 8 9 x 11 12 x x	1	2020
13.	1 2 3 x 5 x x 8 9 x x x 13 14	1	1215
14.	1 2 3 x 5 x x 8 x 10 11 12 x x	5	72, 420, 467, 908, 1727
15.	1 2 3 x 5 x x x 9 10 11 12 x x	2	514, 598
16.	1 2 3 x x x 7 8 9 x 11 12 x x	1	1402
17.	1 2 3 x x x x 8 9 10 11 12 x x	1	1175
18.	1 2 3 x x x x 8 x 10 x 12 13 14	1	1029
19.	1 2 x 4 5 x x 8 9 10 11 x x x	1	505
20.	1 2 x 4 x x x 8 9 10 11 12 x x	1	275
21.	1 2 x x 5 6 x 8 9 10 x 12 x x	1	1256
22.	1 2 x x 5 x 7 8 9 10 11 x x x	1	803
23.	1 2 x x 5 x 7 8 9 10 x x 13 x	1	1693
24.	1 2 x x 5 x 7 8 9 10 x x x 14	1	318
25.	1 2 x x 5 x 7 8 9 x 11 x 13 x	1	309
26.	1 2 x x 5 x 7 8 x 10 11 12 x x	2	1540, 1894
27.	1 2 x x 5 x 7 8 x 10 x x x 14	1	118
28.	1 2 x x 5 x 7 x 9 10 11 12 x x	2	1218, 1403
29.	1 2 x x 5 x 7 x x 10 11 12 13 x	2	544, 1603
30.	1 2 x x 5 x x 8 9 10 11 12 x x	22	70, 132, 436, 596, 844, 905, 983, 1185, 1189, 1245, 1342, 1375, 1491, 1517, 1549, 1682, 1762, 1858, 1920, 1955, 1958, 1976
31.	1 2 x x 5 x x 8 9 10 11 x 13 x	1	130
32.	1 2 x x 5 x x 8 9 10 x 12 13 x	1	1578
33.	1 2 x x 5 x x 8 9 10 x 12 x 14	1	1924
34.	1 2 x x 5 x x 8 9 x 11 12 13 x	1	759
35.	1 2 x x 5 x x 8 x 10 11 12 13 x	1	1376

No.	Pattern	Occur- rences	Item Serial Numbers
36.	1 2 x x 5 x x 8 x 10 11 12 x 14	1	1997
37.	1 2 x x 5 x x x 9 10 11 12 13 x	2	233, 1172
38.	1 2 x x x 6 x x 9 10 11 12 13 x	1	2021
39.	1 2 x x x x 7 8 9 10 x 12 x 14	1	1859
40.	1 x 3 x 5 x x 8 9 10 11 12 x x	6	437, 821, 1258, 1354, 1529, 1842
41.	1 x 3 x 5 x x 8 x 10 11 12 13 x	1	1699
42.	1 x 3 x 5 x x 8 x 10 11 12 x 14	1	1269
43.	1 x 3 x 5 x x 8 x 10 x 12 13 14	1	113
44.	1 x 3 x 5 x x x 9 10 11 x 13 14	1	1214
45.	1 x x x 5 x 7 8 9 10 11 12 x x	7	399, 756, 916, 1129, 1227, 1773, 1832
46.	1 x x x 5 x 7 x 9 10 11 12 13 x	1	1992
47.	1 x x x 5 x x 8 9 10 11 12 13 x	4	205, 1179, 1667, 1868
48.	1 x x x 5 x x 8 9 10 11 12 x 14	1	846
49.	x 2 3 x 5 6 x 8 9 10 x 12 x x	1	195
50.	x 2 3 x 5 x 7 8 9 10 11 x x x	1	1933
51.	x 2 3 x 5 x 7 8 9 10 x x x 14	1	1203
52.	x 2 3 x 5 x 7 8 x 10 11 12 x x	1	1457
53.	x 2 3 x 5 x x 8 9 10 11 12 x x	1	1771
54.	x 2 x x 5 x x 8 9 10 11 12 x 14	1	1626
55.	x x 3 x 5 x 7 8 9 10 11 12 x x	1	1733
56.	x x 3 x 5 x x 8 9 10 11 12 13 x	1	101
57.	x x 3 x 5 x x 8 9 10 x 12 13 14	1	1359
58.	x x 3 x 5 x x 8 x 10 11 12 13 14	1	1425
59.	x x 3 x 5 6 x 8 9 10 11 x x 14	1	69
60.	x x x x 5 6 7 8 9 10 x 12 x 14	1	957
61.	x x x x 5 x 7 8 9 10 11 12 13 x	1	381
62.	x x x x 5 x x 8 9 10 11 12 13 14	1	1559

Total Number of Items 112

List 8.

Sets Containing 7 Occurrences

Maximum Number of Sets of this Type: 3482
 Number of Sets of this Type Occurring: 82

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 4 5 x 7 x x 10 x x x x	1	607
2.	1 2 3 4 5 x x 8 x 10 x x x x	1	294
3.	1 2 3 x 5 x 7 8 9 x x x x x	2	131, 1528
4.	1 2 3 x 5 x 7 8 x 10 x x x x	1	1816
5.	1 2 3 x 5 x x 8 9 10 x x x x	3	830, 1169, 1765
6.	1 2 3 x 5 x x 8 9 x x 12 x x	1	1707
7.	1 2 3 x 5 x x 8 x 10 x x 13 x	1	1318
8.	1 2 3 x 5 x x 8 x x 11 12 x x	2	157, 1454
9.	1 2 3 x 5 x x 8 x x x x 13 14	1	88
10.	1 2 3 x 5 x x x 9 10 11 x x x	1	1713
11.	1 2 3 x 5 x x x x 10 11 12 x x	4	1140, 1328, 1399, 1686
12.	1 2 3 x x x x 8 9 10 11 x x x	1	1968
13.	1 2 3 x x x x 8 x 10 11 12 x x	1	38
14.	1 2 x 4 x x 7 x x 10 11 12 x x	1	221
15.	1 2 x x 5 x 7 8 9 10 x x x x	2	565, 601
16.	1 2 x x 5 x 7 8 9 x x 12 x x	1	1278
17.	1 2 x x 5 x 7 8 9 x x x 13 x	1	888
18.	1 2 x x 5 x 7 8 x 10 x 12 x x	1	1440
19.	1 2 x x 5 x 7 8 x 10 x x 13 x	1	42
20.	1 2 x x 5 x 7 x 9 10 x x 13 x	1	1221
21.	1 2 x x 5 x 7 x x 10 11 12 x x	1	1639
22.	1 2 x x 5 x 7 x x 10 11 x 13 x	1	1945
23.	1 2 x x 5 x x 8 9 10 11 x x x	5	461, 1558, 1754, 1790, 1964
24.	1 2 x x 5 x x 8 9 10 x 12 x x	4	869, 1261, 1360, 1553
25.	1 2 x x 5 x x 8 9 10 x x 13 x	4	50, 775, 1297, 1950
26.	1 2 x x 5 x x 8 9 x 11 12 x x	1	1037
27.	1 2 x x 5 x x 8 x 10 11 12 x x	7	263, 1224, 1379, 1746, 1962, 1963, 2023
28.	1 2 x x 5 x x 8 x x x 12 13 14	1	126
29.	1 2 x x 5 x x x 9 10 11 12 x x	8	374, 400, 520, 892, 1460, 1748, 1785, 1946
30.	1 2 x x 5 x x x 9 10 11 x 13 x	1	1507
31.	1 2 x x 5 x x x x 10 11 12 x 14	1	1400
32.	1 2 x x 5 x x x x 10 11 x 13 14	1	211
33.	1 2 x x x x 7 8 9 x 11 12 x x	1	1181
34.	1 2 x x x x x 8 9 10 11 12 x x	4	669, 849, 1176, 1993
35.	1 2 x x x x x 8 9 10 11 x 13 x	2	769, 2028
36.	1 2 x x x x x x 9 10 11 12 x 14	1	1833

No.	Pattern	Occurrences	Item Serial Numbers
37.	1 2 x x x x x x x 10 11 12 13 14	2	1413, 1943
38.	1 x 3 4 5 x x 8 x x 11 12 x x	1	753
39.	1 x 3 x 5 x 7 8 9 10 x x x x	1	300
40.	1 x 3 x 5 x x 8 9 10 11 x x x	1	1769
41.	1 x 3 x 5 x x 8 9 10 11 x x x	1	1580
42.	1 x 3 x 5 x x 8 9 10 x 12 x x	1	1346
43.	1 x 3 x 5 x x 8 x 10 11 12 x x	4	298, 1022, 1190, 1753
44.	1 x 3 x 5 x x 8 x 10 x 12 13 x	1	169
45.	1 x 3 x 5 x x 8 x x 11 x 13 14	1	502
46.	1 x 3 x 5 x x x 9 10 11 12 x x	1	383
47.	1 x 3 x 5 x x x 9 x 11 12 x 14	1	1884
48.	1 x 3 x x 6 x x 9 10 11 12 x x	1	123
49.	1 x 3 x x x 7 x 9 10 11 x x 14	1	1670
50.	1 x x x 5 6 7 x 9 x 11 12 x x	1	1198
51.	1 x x x 5 x 7 8 9 10 11 x x x	1	1511
52.	1 x x x 5 x 7 8 9 10 x 12 x x	1	906
53.	1 x x x 5 x 7 8 x 10 11 12 x x	3	141, 1120, 1196
54.	1 x x x 5 x 7 x 9 10 11 12 x x	1	1755
55.	1 x x x 5 x x 8 9 10 11 12 x x	18	201, 225, 555, 557, 868, 1002, 1059, 1072, 1073, 1092, 1308, 1322, 1386, 1516, 1651, 1680, 1749, 1815
56.	1 x x x 5 x x 8 9 10 11 x 13 x	1	867
57.	1 x x x 5 x x 8 9 10 11 x x 14	1	1587
58.	1 x x x 5 x x 8 9 x 11 12 13 x	1	1975
59.	1 x x x 5 x x 8 x 10 11 12 x 14	1	1599
60.	1 x x x 5 x x x 9 10 11 12 x 14	1	1053
61.	1 x x x x x 7 8 9 10 11 12 x x	1	176
62.	x 2 3 x 5 x x 8 x 10 11 12 x x	2	475, 1518
63.	x 2 3 x x x x 8 9 10 11 12 x x	1	1581
64.	x 2 3 x x x x 8 x 10 11 12 13 x	2	1850, 1854
65.	x 2 x x 5 6 x 8 9 x x x 13 14	1	23
66.	x 2 x x 5 x 7 8 9 10 11 x x x	1	1299
67.	x 2 x x 5 x x 8 9 10 11 12 x x	1	1286
68.	x 2 x x 5 x x 8 9 10 11 x x 14	1	1419
69.	x 2 x x x x 7 8 9 10 x 12 13 x	1	494
70.	x 2 x x x x x 8 9 10 11 12 13 x	1	1524
71.	x x 3 4 5 x x 8 9 10 x 12 x x	1	788

No.	Pattern	Occur- rences	Item Serial Numbers
72.	x x 3 x 5 x 7 8 x 10 11 12 x x	2	1270, 1324
73.	x x 3 x 5 x 7 x 9 10 11 12 x x	1	690
74.	x x 3 x 5 x x 8 9 10 11 12 x x	2	56, 543
75.	x x 3 x 5 x x 8 9 10 11 x x 14	1	106
76.	x x 3 x 5 x x x 9 10 11 12 x 14	1	477
77.	x x x 4 5 6 x 8 9 10 11 x x x	1	1424
78.	x x x 4 5 6 x x 9 10 11 12 x x	1	397
79.	x x x x 5 6 7 x 9 10 11 12 x x	1	483
80.	x x x x 5 x 7 8 9 10 11 12 x x	3	470, 904, 1764
81.	x x x x 5 x 7 8 x 10 11 12 13 x	1	1891
82.	x x x x 5 x x 8 9 10 11 12 13 x	1	1435
Total Number of Items			146

List 9.

Sets of 6 Occurrences

Maximum Number of Sets of this Type: 3003
 Number of Sets of this Type Occurring: 96

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 x 5 x 7 x 9 x x x x x	1	296
2.	1 2 3 x 5 x x 8 x 10 x x x x	1	1374
3.	1 2 3 x 5 x x x 9 x x 12 x x	1	741
4.	1 2 3 x 5 x x x x 10 11 x x x	1	1292
5.	1 2 3 x 5 x x x x 10 x 12 x x	1	328
6.	1 2 3 x 5 x x x x x 11 12 x x	1	729
7.	1 2 3 x x x x 8 x 10 11 x x x	1	1017
8.	1 2 3 x x x x x 9 10 11 x x x	1	611
9.	1 2 3 x x x x x 9 x 11 12 x x	1	911
10.	1 2 x 4 5 6 x x x 10 x x x x	1	393
11.	1 2 x 4 5 6 x x x x 11 x x x	1	89
12.	1 2 x 4 5 x x x x x x 12 13 x	1	172
13.	1 2 x x 5 6 x x 9 10 x x x x	1	1546
14.	1 2 x x 5 x 7 8 x 10 x x x x	1	1702
15.	1 2 x x 5 x 7 x 9 10 x x x x	1	332
16.	1 2 x x 5 x 7 x 9 x 11 x x x	1	1564
17.	1 2 x x 5 x 7 x x x 11 12 x x	2	697, 2005

No.	Pattern	Occur- rences	Item Serial Numbers
18.	1 2 x x 5 x x 8 9 10 x x x x	4	635, 814, 1913, 1923
19.	1 2 x x 5 x x 8 9 x 11 x x x	1	1896
20.	1 2 x x 5 x x 8 x 10 11 x x x	5	391, 1242, 1601, 1921, 1983
21.	1 2 x x 5 x x 8 x 10 x x x 14	2	1343, 1414
22.	1 2 x x 5 x x 8 x x 11 12 x x	1	725
23.	1 2 x x 5 x x x 9 10 11 x x x	2	1080, 1300
24.	1 2 x x 5 x x x 9 10 x x 13 x	1	754
25.	1 2 x x 5 x x x 9 x 11 12 x x	2	1027, 1555
26.	1 2 x x 5 x x x 9 x x 12 x 14	1	1745
27.	1 2 x x 5 x x x x 10 11 12 x x	2	1008, 1721
28.	1 2 x x x x 7 x 9 x 11 12 x x	1	1043
29.	1 2 x x x x x 8 9 10 11 x x x	2	758, 1514
30.	1 2 x x x x x 8 x 10 11 12 x x	3	896, 1280, 1730
31.	1 2 x x x x x x 9 10 11 12 x x	3	207, 1545, 1856
32.	1 2 x x x x x x 9 x 11 12 x 14	1	1593
33.	1 2 x x x x x x x 10 11 12 13 x	1	1264
34.	1 x 3 x 5 x x 8 x 10 11 x x x	1	1705
35.	1 x 3 x 5 x x 8 x 10 x 12 x x	1	1692
36.	1 x 3 x 5 x x 8 x 10 x x 13 x	1	1335
37.	1 x 3 x 5 x x 8 x x x 12 x 14	1	2018
38.	1 x 3 x 5 x x x 9 10 11 x x x	1	618
39.	1 x 3 x 5 x x x 9 x 11 x 13 x	1	1195
40.	1 x 3 x 5 x x x x 10 11 x 13 x	1	58
41.	1 x 3 x x x x 8 9 10 11 x x x	1	1340
42.	1 x 3 x x x x 8 9 10 x 12 x x	1	1848
43.	1 x 3 x x x x 8 x 10 11 12 x x	1	1966
44.	1 x 3 x x x x x 9 10 11 12 x x	1	793
45.	1 x x 4 5 x x x 9 x 11 12 x x	1	1212
46.	1 x x x 5 x 7 8 9 10 x x x x	1	136
47.	1 x x x 5 x 7 8 x 10 x 12 x x	1	515
48.	1 x x x 5 x 7 8 x 10 x 12 x x	1	702
49.	1 x x x 5 x 7 8 x 10 x x 13 x	1	230
50.	1 x x x 5 x 7 x x 10 11 12 x x	1	1220
51.	1 x x x 5 x x 8 9 10 11 x x x	2	492, 823
52.	1 x x x 5 x x 8 9 x 11 12 x x	3	811, 1061, 1792
53.	1 x x x 5 x x 8 9 x 11 12 x x	1	1563
54.	1 x x x 5 x x 8 x 10 11 12 x x	7	75, 147, 513, 605, 952, 1063, 1588

No.	Pattern	Occurrences	Item Serial Numbers
55.	1 x x x 5 x x x 9 10 11 12 x x	2	1609, 1653
56.	1 x x x 5 x x x 9 x 11 12 13 x	2	325, 1042
57.	1 x x x x 6 x 8 9 10 11 x x x	1	1412
58.	1 x x x x 6 x x 9 x 11 12 x 14	1	1990
59.	1 x x x x x 7 x 9 10 11 12 x x	2	1024, 1819
60.	1 x x x x x x 8 9 10 11 12 x x	4	586, 1103, 1380, 1493
61.	1 x x x x x x 8 9 10 11 x 13 x	1	748
62.	x 2 3 x 5 x 7 x 9 10 x x x x	1	2007
63.	x 2 3 x 5 x 7 x 9 x 11 x x x	1	1348
64.	x 2 3 x 5 x x 8 9 10 x x x x	1	524
65.	x 2 3 x 5 x x 8 9 x x 12 x x	1	1353
66.	x 2 3 x x 6 x 8 9 10 x x x x	1	1538
67.	x 2 3 x x x x 8 9 x 11 12 x x	1	510
68.	x 2 3 x x x x x x 10 11 12 13 x	1	566
69.	x 2 x 4 5 6 x x x 10 x 12 x x	1	357
70.	x 2 x x 5 x x x 9 10 11 x 13 x	1	1793
71.	x 2 x x x x 7 x 9 10 11 12 x x	1	167
72.	x 2 x x x x x 8 9 10 11 12 x x	4	1453, 1892, 2003, 2033
73.	x x 3 4 5 x x x x 10 11 12 x x	1	431
74.	x x 3 x 5 x 7 8 x 10 11 x x x	1	886
75.	x x 3 x 5 x 7 8 x 10 x 12 x x	1	1047
76.	x x 3 x 5 x 7 8 x 10 x x 13 x	1	1567
77.	x x 3 x 5 x x 8 9 10 x 12 x x	1	1206
78.	x x 3 x 5 x x 8 9 10 x x x 14	1	1134
79.	x x 3 x 5 x x 8 9 x 11 12 x x	1	478
80.	x x 3 x 5 x x 8 x 10 11 12 x x	3	137, 1665, 1708
81.	x x 3 x 5 x x x 9 10 11 12 x x	1	1676
82.	x x x x 5 6 x x 9 10 11 12 x x	1	1095
83.	x x x x 5 x 7 8 9 10 x x 13 x	1	2004
84.	x x x x 5 x 7 8 9 10 x x x 14	1	1240
85.	x x x x 5 x 7 8 x 10 11 12 x x	5	170, 674, 1076, 1105, 1613
86.	x x x x 5 x 7 x 9 10 11 12 x x	1	1548
87.	x x x x 5 x x 8 9 10 11 12 x x	10	152, 768, 809, 841, 843, 930, 939, 1436, 1627, 2019
88.	x x x x 5 x x 8 9 10 11 x 13 x	2	1715, 1999
89.	x x x x 5 x x 8 x 10 11 12 13 x	1	955
90.	x x x x 5 x x x 9 10 11 12 13 x	2	1071, 1167
91.	x x x x 5 x x x 9 10 11 12 x 14	1	1980
92.	x x x x x 6 x 8 x 10 x 12 13 14	1	48

No.	Pattern	Occur- rences	Item Serial Numbers
93.	x x x x x x 7 8 9 10 11 12 x x	3	1131, 1238, 1556
94.	x x x x x x 7 8 x 10 11 12 13 x	1	29
95.	x x x x x x 7 8 x 10 11 12 x 14	1	1081
96.	x x x x x x x 8 9 10 11 12 13 x	2	187, 1936
Total Number of Items			151

List 10.

Sets of 5 Occurences

Maximum Number of Sets of this Type: 2002

Number of Sets of this Type Occurring: 125

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 x 5 x 7 x x x x x x x	1	1164
2.	1 2 3 x 5 x x 8 x x x x x x	3	351, 516, 2011
3.	1 2 3 x 5 x x x x 10 x x x x	1	1034
4.	1 2 3 x x x x 8 9 x x x x x	1	1000
5.	1 2 3 x x x x 8 x 10 x x x x	1	76
6.	1 2 3 x x x x x 9 10 x x x x	2	295, 1572
7.	1 2 x 4 5 6 x x x x x x x x	1	1287
8.	1 2 x x 5 x 7 x 9 x x x x x	1	471
9.	1 2 x x 5 x 7 x x 10 x x x x	2	320, 558
10.	1 2 x x 5 x x 8 9 x x x x x	1	1331
11.	1 2 x x 5 x x 8 x 10 x x x x	5	308, 604, 807, 1268, 2014
12.	1 2 x x 5 x x 8 x x 11 x x x	2	217, 750
13.	1 2 x x 5 x x x 9 10 x x x x	1	1723
14.	1 2 x x 5 x x x 9 x 11 x x x	1	1945
15.	1 2 x x 5 x x x x 10 11 x x x	4	495, 631, 683, 1450
16.	1 2 x x 5 x x x x 10 x 12 x x	2	915, 1249
17.	1 2 x x 5 x x x x 10 x x 13 x	5	175, 691, 1207, 1305, 1336
18.	1 2 x x 5 x x x x x 11 12 x x	1	770
19.	1 2 x x 5 x x x x x 11 x 13 x	1	1869
20.	1 2 x x x 6 x 8 x 10 x x x x	1	85
21.	1 2 x x x 6 x 8 x x x x 13 x	1	376
22.	1 2 x x x x 7 8 x x x 12 x x	1	877
23.	1 2 x x x x 7 x x x 11 12 x x	1	11

No.	Pattern	Occur- rences	Item Serial Numbers
24.	1 2 x x x x x 8 9 10 x x x x	5	953, 979, 1421, 1807, 1864
25.	1 2 x x x x x 8 x 10 11 x x x	2	1747, 1857
26.	1 2 x x x x x 8 x 10 x 12 x x	1	1876
27.	1 2 x x x x x 8 x 10 x x 13 x	1	1949
28.	1 2 x x x x x x 9 10 x x x 14	1	2013
29.	1 2 x x x x x x 9 x 11 12 x x	2	346, 1339
30.	1 2 x x x x x x x 10 11 12 x x	3	667, 1253, 1634
31.	1 2 x x x x x x x x 11 12 13 x	1	530
32.	1 x 3 x 5 x x 8 x 10 x x x x	1	878
33.	1 x 3 x 5 x x 8 x x x 12 x x	1	347
34.	1 x 3 x 5 x x x x x 11 12 x x	1	215
35.	1 x 3 x x x x x 9 x 11 12 x x	1	189
36.	1 x 3 x x x 7 8 x x 11 x x x	1	486
37.	1 x 3 x x x x 8 x 10 11 x x x	1	446
38.	1 x 3 x x x x x 9 x x x 13 14	1	496
39.	1 x x 4 x x x 8 9 10 x x x x	1	6
40.	1 x x x 5 6 x x 9 10 x x x x	2	1393, 1409
41.	1 x x x 5 6 x x x 10 x 12 x x	1	439
42.	1 x x x 5 x 7 8 9 x x x x x	1	801
43.	1 x x x 5 x 7 8 x 10 x x x x	1	845
44.	1 x x x 5 x 7 x 9 x 11 x x x	1	1236
45.	1 x x x 5 x 7 x x 10 x x 13 x	1	1569
46.	1 x x x 5 x x 8 9 10 x x x x	4	806, 852, 1225, 1294
47.	1 x x x 5 x x 8 9 x 11 x x x	2	782, 1922
48.	1 x x x 5 x x 8 9 x x x x 14	1	638
49.	1 x x x 5 x x 8 x 10 11 x x x	6	1, 421, 639, 799, 872, 1904
50.	1 x x x 5 x x 8 x 10 x 12 x x	2	523, 738
51.	1 x x x 5 x x 8 x x 11 12 x x	2	633, 1444
52.	1 x x x 5 x x 8 x x x 12 x 14	1	1345
53.	1 x x x 5 x x x 9 10 11 x x x	3	851, 1144, 1635
54.	1 x x x 5 x x x 9 10 x x x 14	1	1947
55.	1 x x x 5 x x x x 10 11 12 x x	5	438, 574, 616, 865, 1075
56.	1 x x x 5 x x x x x 11 12 13 x	2	124, 191
57.	1 x x x x 6 x 8 x 10 11 x x x	1	1377
58.	1 x x x x 6 x x 9 10 11 x x x	1	1397
59.	1 x x x x x 7 8 9 x x 12 x x	1	794
60.	1 x x x x x 7 x 9 10 11 x x x	1	2015
61.	1 x x x x x 7 x 9 10 x 12 x x	1	842
62.	1 x x x x x 7 x x 10 11 x 13 x	1	188

No.	Pattern	Occur- rences	Item Serial Numbers
63.	1 x x x x x x 8 9 10 11 x x x	3	273, 942, 1410
64.	1 x x x x x x 8 9 10 x 12 x x	1	1535
65.	1 x x x x x x 8 x 10 11 12 x x	7	119, 813, 881, 1005, 1525, 1586, 2040,
66.	1 x x x x x x 8 x x 11 12 13 x	1	1373
67.	1 x x x x x x x 9 10 11 12 x x	3	902, 1135, 1492
68.	1 x x x x x x x 9 x 11 12 13 x	1	1846
69.	x 2 3 x 5 x x 8 x x 11 x x x	1	2032
70.	x 2 3 x 5 x x x 9 x 11 x x x	1	1192
71.	x 2 3 x x x x x x 10 11 12 x x	1	185
72.	x 2 x x 5 x 7 x x x 11 12 x x	1	766
73.	x 2 x x 5 x x 8 x 10 x 12 x x	1	907
74.	x 2 x x 5 x x 8 x x 11 12 x x	1	34
75.	x 2 x x 5 x x 8 x 10 x x x 14	1	1151
76.	x 2 x x 5 x x x 9 10 11 x x x	1	966
77.	x 2 x x 5 x x x 9 x 11 12 x x	1	721
78.	x 2x x 5 x x x x 10 11 12 x x	3	628, 673, 1243
79.	x 2 x x x x 7 x 9 10 11 x x x	1	1141
80.	x 2 x x x x 7 x x 10 11 12 x x	1	2027
81.	x 2 x x x x x x 9 10 11 12 x x	2	554, 826
82.	x x 3 x 5 6 7 x x 10 x x x x	1	1163
83.	x x 3 x 5 x 7 x 9 10 x x x x	1	945
84.	x x 3 x 5 x 7 x 9 x 11 x x x	1	1078
85.	x x 3 x 5 x x 8 x 10 11 x x x	1	229
86.	x x 3 x 5 x x 8 x 10 x x x 14	1	1325
87.	x x 3 x 5 x x 8 x x 11 12 x x	1	692
88.	x x 3 x 5 x x x 9 10 11 x x x	2	1719, 1925
89.	x x 3 x 5 x x x 9 x 11 12 x x	2	525, 1995
90.	x x 3 x 5 x x x x 10 11 x 13 x	1	1703
91.	x x 3 x x 6 7 x x x 11 12 x x	1	1147
92.	x x 3 x x x x 8 9 10 x 12 x x	1	1709
93.	x x 3 x x x x 8 9 x 11 12 x x	1	723
94.	x x 3 x x x x 8 x 10 11 12 x x	2	354, 1750
95.	x x 3 x x x x x x 10 11 12 x 14	1	1199
96.	x x x 4 5 x x x 9 10 11 x x x	1	792
97.	x x x 4 5 x x x x 10 11 12 x x	1	935
98.	x x x 4 x 6 7 x x x 11 12 x x	1	272
99.	x x x 4 x 6 x 8 x x 11 12 x x	1	577
100.	x x x x 5 6 x 8 9 x 11 x x x	1	1570

No.	Pattern	Occurrences	Item Serial Numbers
101.	x x x x 5 x 7 8 9 10 x x x x	2	338, 629
102.	x x x x 5 x 7 8 9 x 11 x x x	1	1115
103.	x x x x 5 x 7 8 x 10 x 12 x x	2	194, 1714
104.	x x x x 5 x 7 x 9 10 x 12 x x	1	634
105.	x x x x 5 x 7 x x 10 11 12 x x	1	146
106.	x x x x 5 x x 8 9 10 11 x x x	5	84, 937, 941, 1123, 1886
107.	x x x x 5 x x 8 9 10 x 12 x x	3	20, 1056, 2001
108.	x x x x 5 x x 8 9 10 x x 13 x	2	200, 800
109.	x x x x 5 x x 8 9 10 x x x 14	1	1530
110.	x x x x 5 x x 8 9 x 11 12 x x	3	258, 432, 1847
111.	x x x x 5 x x 8 9 x 11 x 13 x	1	526
112.	x x x x 5 x x 8 x 10 11 12 x x	8	109, 220, 385, 550, 1168, 1250, 1479, 2024
113.	x x x x 5 x x 8 x 10 11 12 x x	1	251
114.	x x x x 5 x x 8 x 10 x 12 13 x	1	1046
115.	x x x x 5 x x x 9 10 11 12 x x	12	410, 546, 677, 894, 895, 970, 978, 1142, 1226, 1658, 1767, 1987
116.	x x x x x 6 7 8 9 10 x x x x	1	1216
117.	x x x x x 6 7 x x 10 11 12 x x	1	257
118.	x x x x x 6 x 8 9 10 11 x x x	1	2
119.	x x x x x 6 x x 9 10 11 12 x x	1	1982
120.	x x x x x x 7 8 9 10 x 12 x x	1	1898
121.	x x x x x x 7 x 9 10 11 12 x x	1	585
122.	x x x x x x x 8 9 10 11 12 x x	7	3, 138, 276, 425, 1257, 1901, 1960
123.	x x x x x x x 8 9 x 11 12 x 14	1	456
124.	x x x x x x x 8 x 10 11 12 13 x	2	820, 934
125.	x x x x x x x 8 x 10 11 12 x 14	1	2010

Total Number of Items 221

List 11.

Sets of 4 Occurrences

Maximum Number of Sets of this Type: 1001
 Number of Sets of this Type Occurring: 134

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 x 5 x x x x x x x x x	3	53, 720, 997
2.	1 2 3 x x x x x 9 x x x x x	1	12
3.	1 2 3 x x x x x x 10 x x x x	1	704
4.	1 2 3 x x x x x x x 11 x x x	2	1202, 1288
5.	1 2 x x 5 x 7 x x x x x x x	1	365
6.	1 2 x x 5 x x 8 x x x x x x	4	545, 719, 798, 1582,
7.	1 2 x x 5 x x x 9 x x x x x	4	640, 656, 680, 2006
8.	1 2 x x 5 x x x x 10 x x x x	5	43, 464, 689, 693, 897
9.	1 2 x x 5 x x x x x 11 x x x	5	21, 60, 90, 762, 1178
10.	1 2 x x 5 x x x x x x 12 x x	2	1028, 1030
11.	1 2 x x 5 x x x x x x x 13 x	2	33, 742
12.	1 2 x x 5 x x x x x x x 14	2	362, 1970
13.	1 2 x x x 6 x x x 10 x x x x	1	235
14.	1 2 x x x x 7 x x 10 x x x x	1	1003
15.	1 2 x x x x x 8 9 x x x x x	3	752, 763, 1254
16.	1 2 x x x x x 8 x 10 x x x x	1	36
17.	1 2 x x x x x 8 x x 11 x x x	1	649
18.	1 2 x x x x x x 9 10 x x x x	3	412, 1566, 1809
19.	1 2 x x x x x x 9 x x 12 x x	1	1104
20.	1 2 x x x x x x 9 x x x 13 x	1	791
21.	1 2 x x x x x x 9 x x x x 14	1	1290
22.	1 2 x x x x x x x 10 11 x x x	1	654
23.	1 2 x x x x x x x 10 x 12 x x	3	408, 423, 1155
24.	1 2 x x x x x x x x 11 12 x x	3	488, 1408, 1991
25.	1 2 x x x x x x x x 11 x 13 x	1	46
26.	1 x 3 x 5 x x 8 x x x x x x	1	1235
27.	1 x 3 x 5 x x x x 10 x x x x	3	860, 1490, 1985
28.	1 x 3 x x x x 8 9 x x x x x	1	773
29.	1 x 3 x x x x x x 10 11 x x x	1	1231
30.	1 x x 4 5 6 x x x x x x x x	1	1153
31.	1 x x 4 5 x x x x 10 x x x x	1	104
32.	1 x x x 5 x 7 8 x x x x x x	1	1590
33.	1 x x x 5 x x 8 9 x x x x x	1	1867
34.	1 x x x 5 x 8 x 9 x x x x x	10	39, 193, 377, 737, 847, 1388, 1418, 1573, 1726, 1816
35.	1 x x x 5 x x 8 x x 11 x x x	3	873, 1878, 1956
36.	1 x x x 5 x x 8 x x x 12 x x	2	155, 1180
37.	1 x x x 5 x x 8 x x x x x 14	1	1664

No.	Pattern	Occur- rences	Item Serial Numbers
38.	1 x x x 5 x x x 9 10 x x x x	3	103, 591, 1577
39.	1 x x x 5 x x x 9 x 11 x x x	2	306, 840
40.	1 x x x 5 x x x 9 x x 12 x x	1	380
41.	1 x x x 5 x x x 9 x x x 13 x	1	129
42.	1 x x x 5 x x x 9 x x x x 14	1	1574
43.	1 x x x 5 x x x x 10 11 x x x	5	810, 861, 874, 1711, 1802
44.	1 x x x 5 x x x x 10 x 12 x x	3	31, 1431, 1770
45.	1 x x x 5 x x x x 10 x x x 14	1	223
46.	1 x x x 5 x x x x x 11 12 x x	6	54, 481, 701, 825, 1136, 1775
47.	1 x x x x x 7 8 x 10 x x x x	1	1465
48.	1 x x x x x 7 x x 10 11 x x x	1	1988
49.	1 x x x x x 7 x x x 11 12 x x	2	989, 1100
50.	1 x x x x x x 8 9 10 x x x x	3	703, 862, 1948
51.	1 x x x x x x 8 x 10 11 x x x	3	140, 529, 1725
52.	1 x x x x x x 8 x 10 x 12 x x	2	632, 1813
53.	1 x x x x x x 8 x 10 x x x 14	1	876
54.	1 x x x x x x 8 x x 11 12 x x	1	433
55.	1 x x x x x x x 9 10 11 x x x	2	236, 1934
56.	1 x x x x x x x 9 10 x 12 x x	2	818, 1219
57.	1 x x x x x x x 9 x 11 12 x x	2	389, 1293
58.	1 x x x x x x x x 10 11 12 x x	5	249, 283, 859, 901, 1473
59.	1 x x x x x x x x 10 11 x 13 x	1	202
60.	1 x x x x x x x x 10 x 12 13 x	2	608, 1504
61.	x 2 3 x 5 x x x x x x x 14	1	97
62.	x 2 3 x x x x x 9 x 11 x x x	1	534
63.	x 2 3 x x x x x x 10 11 x x x	1	642
64.	x 2 x 4 5 x x x 9 x x x x x	1	592
65.	x 2 x x 5 x x 8 9 x x x x x	1	1691
66.	x 2 x x 5 x x 8 x 10 x x x x	1	1364
67.	x 2 x x 5 x x 8 x x 11 x x x	1	1585
68.	x 2 x x 5 x x x 9 10 x x x x	1	493
69.	x 2 x x 5 x x x x 10 11 x x x	1	1724
70.	x 2 x x 5 x x x x 10 x x 13 x	1	1089
71.	x 2 x x 5 x x x x x 11 12 x x	2	575, 1981
72.	x 2 x x x x x 8 9 10 x x x x	2	700, 1211
73.	x 2 x x x x x x 9 10 x 12 x x	1	1817
74.	x 2 x x x x x x x 10 11 12 x x	4	443, 1014, 1107, 1594
75.	x x 3 4 5 x x 8 x x x x x x	1	923

No.	Pattern	Occur- rences	Item Serial Numbers
76.	x x 3 4 5 x x x x 10 x x x x	1	341
77.	x x 3 x 5 x 7 x 9 x x x x x	1	355
78.	x x 3 x 5 x x 8 9 x x x x	1	1469
79.	x x 3 x 5 x x 8 x x 11 x x x	1	1716
80.	x x 3 x 5 x x x 9 10 x x x x	4	331, 561, 1108, 1462
81.	x x 3 x 5 x x x x 10 11 x x x	3	447, 572, 1706
82.	x x 3 x 5 x x x x 10 x x x 14	1	497
83.	x x 3 x 5 x x x x x 11 12 x x	2	1629, 2041
84.	x x 3 x 5 x x x x x x 13 14	1	648
85.	x x 3 x x x 7 x x x 11 12 x x	1	728
86.	x x 3 x x x x 8 x 10 11 x x x	1	1006
87.	x x 3 x x x x 8 x x 11 12 x x	2	583, 1759
88.	x x 3 x x x x x 9 10 11 x x x	2	266, 394
89.	x x 3 x x x x x 9 10 x 12 x x	1	856
90.	x x 3 x x x x x x 10 11 12 x x	4	267, 858, 1007, 2003
91.	x x x 4 5 x x x x 10 x x 13 x	1	606
92.	x x x 4 x 6 x x 9 10 x x x x	1	5
93.	x x x 4 x x x x x 10 11 12 x x	1	2044
94.	x x x x 5 6 x x 9 10 x x x x	1	92
95.	x x x x 5 6 x x x x 11 12 x x	2	358, 1052
96.	x x x x 5 x 7 8 x 10 x x x x	2	646, 1066
97.	x x x x 5 x 7 8 x x x 12 x x	1	1094
98.	x x x x 5 x 7 x x 10 11 x x x	1	1561
99.	x x x x 5 x 7 x x 10 x 12 x x	1	161
100.	x x x x 5 x 7 x x 11 12 x x	2	98, 1800
101.	x x x x 5 x x 8 9 10 x x x x	6	174, 299, 903, 1165, 1565, 1675
102.	x x x x 5 x x 8 9 x 11 x x x	1	1096
103.	x x x x 5 x x 8 9 x x 12 x x	1	802
104.	x x x x 5 x x 8 9 x x 13 x	1	178
105.	x x x x 5 x x 8 x 10 11 x x x	4	144, 570, 1663, 2034
106.	x x x x 5 x x 8 x 10 x 12 x x	2	110, 1004
107.	x x x x 5 x x 8 x 10 x x 13 x	1	994
108.	x x x x 5 x x 8 x x 11 12 x x	5	150, 676, 731, 1426, 1674
109.	x x x x 5 x x 8 x x 11 x 13 x	1	51
110.	x x x x 5 x x 8 x x x 12 13 x	1	1344
111.	x x x x 5 x x 8 x x x 13 14	1	745
112.	x x x x 5 x x x 9 10 11 x x x	6	243, 879, 1060, 1497, 1531, 1782

No.	Pattern	Occur- rences	Item Serial Numbers
113.	x x x x 5 x x x 9 10 x 12 x x	4	368, 537, 1021, 1562
114.	x x x x 5 x x x 9 10 x x 13 x	1	1016
115.	x x x x 5 x x x 9 x 11 12 x x	2	413, 718
116.	x x x x 5 x x x 9 x 11 x 13 x	1	1827
117.	x x x x 5 x x x x 10 11 12 x x	14	246, 459, 560, 657, 822, 948, 956, 985, 1205, 1296, 1389, 1476, 1715, 1758
118.	x x x x 5 x x x x 11 12 13 x	1	339
119.	x x x x x 6 x 8 9 10 x x x x	1	241
120.	x x x x x 6 x 8 9 x 11 x x x	1	1536
121.	x x x x x 6 x 8 x x 11 12 x x	1	1057
122.	x x x x x 6 x x 9 10 11 x x x	1	1547
123.	x x x x x x 7 8 9 10 x x x x	2	183, 287
124.	x x x x x x 7 8 x 10 11 x x x	1	1489
125.	x x x x x x 7 8 x 10 x x 13 x	2	68, 1882
126.	x x x x x x x 8 9 10 11 x x x	4	967, 1015, 1018, 1954
127.	x x x x x x x 8 9 10 x 12 x x	6	182, 816, 1161, 1381, 1661, 1885
128.	x x x x x x x 8 9 x 11 12 x x	2	226, 1177
129.	x x x x x x x 8 x 10 11 12 x x	6	177, 472, 579, 675, 1087, 1779
130.	x x x x x x x 8 x 10 x 12 13 x	1	1554
131.	x x x x x x x x 9 10 11 12 x x	20	190, 192, 379, 613, 637, 784, 986, 1099, 1121, 1146, 1200, 1282, 1327, 1655, 1656, 1671, 1787, 1837, 1887, 1918
132.	x x x x x x x x 9 10 11 x 13 x	1	1463
133.	x x x x x x x x 9 x 11 12 13 x	1	277
134.	x x x x x x x x x 10 11 12 13 x	4	245, 361, 1055, 1111

Total Number of Items 297

List 12.

Sets of 3 Occurrences

Maximum Number of Sets of this Type: 364
 Number of Sets of this Type Occurring: 100

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 3 x x x x x x x x x x	1	815
2.	1 2 x x 5 x x x x x x x x	22	22, 47, 321, 335, 395, 403, 647, 706, 900, 918, 975, 998, 1044, 1506, 1551, 1568, 1732, 1774, 1879, 1911, 1915, 2000
3.	1 2 x x x x x 8 x x x x x	4	855, 1320, 1494, 1600
4.	1 2 x x x x x x 9 x x x x	7	74, 108, 645, 755, 761, 1337, 1539
5.	1 2 x x x x x x x 10 x x x x	9	13, 171, 441, 615, 743, 808, 1035, 1606, 1874
6.	1 2 x x x x x x x x 11 x x x	4	18, 511, 834, 1919
7.	1 2 x x x x x x x x x 12 x x	5	563, 620, 995, 1417, 1597
8.	1 2 x x x x x x x x x x 14	1	500
9.	1 x 3 x 5 x x x x x x x x	2	134, 163
10.	1 x 3 x x x x 8 x x x x x	1	392
11.	1 x 3 x x x x x x 10 x x x x	1	1368
12.	1 x 3 x x x x x x x x 12 x x	1	153
13.	1 x x 4 5 x x x x x x x x	1	619
14.	1 x x x 5 6 x x x x x x x	1	1370
15.	1 x x x 5 x 7 x x x x x x	1	303
16.	1 x x x 5 x x 8 x x x x x	6	45, 62, 455, 541, 576, 1895
17.	1 x x x 5 x x x 9 x x x x	8	149, 384, 863, 933, 1032, 1475, 1729, 2008
18.	1 x x x 5 x x x x 10 x x x x	7	17, 388, 795, 866, 920, 1619, 1836
19.	1 x x x 5 x x x x x 11 x x x	7	37, 921, 925, 961, 1019, 1048, 1628
20.	1 x x x 5 x x x x x x 12 x x	4	401, 962, 1033, 1917,
21.	1 x x x 5 x x x x x x x 13 x	1	735
22.	1 x x x 5 x x x x x x x x 14	1	1909
23.	1 x x x x 6 x x 9 x x x x	1	148
24.	1 x x x x x 7 8 x x x x x	2	237, 835
25.	1 x x x x x x 8 9 x x x x	2	1217, 1522
26.	1 x x x x x x 8 x 10 x x x x	7	52, 336, 434, 779, 959, 1158, 1959
27.	1 x x x x x x 8 x x 11 x x x	2	1247, 1931
28.	1 x x x x x x 8 x x x x x 14	1	417

No.	Pattern	Occur- rences	Item Serial Numbers
29.	1 x x x x x x x 9 10 x x x x	2	310, 1038
30.	1 x x x x x x x 9 x 11 x x x	1	1510
31.	1 x x x x x x x x 10 11 x x x	10	313, 406, 614, 699, 836, 839, 875, 1371, 1614, 1757
32.	1 x x x x x x x x 10 x 12 x x	4	664, 833, 1187, 1464
33.	1 x x x x x x x x x 11 12 x x	6	184, 783, 932, 1009, 1150 1866
34.	x 2 3 x 5 x x x x x x x x x	1	23
35.	x 2 3 x x x 7 x x x x x x x	1	390
36.	x 2 3 x x x x x x 10 x x x x	1	1838
37.	x 2 3 x x x x x x x 11 x x x	1	1738
38.	x 2 x x 5 x 7 x x x x x x x	1	1474
39.	x 2 x x 5 x x x 9 x x x x x	2	1341, 1777
40.	x 2 x x 5 x x x x 10 x x x x	1	27
41.	x 2 x x 5 x x x x x x 12 x x	1	622
42.	x 2 x x x 6 x x x x 11 x x x	1	9
43.	x 2 x x x x x 8 x x 11 x x x	1	1794
44.	x 2 x x x x x x 9 10 x x x x	3	208, 1233, 1482
45.	x 2 x x x x x x x 10 11 x x x	1	790
46.	x 2 x x x x x x x 10 x 12 x x	1	965
47.	x 2 x x x x x x x 10 x x 13 x	1	760
48.	x x 3 x 5 x 7 x x x x x x x	1	1338
49.	x x 3 x 5 x x 8 x x x x x x	2	428, 1260
50.	x x 3 x 5 x x x 9 x x x x x	2	407, 449
51.	x x 3 x 5 x x x x 10 x x x x	6	120, 539, 627, 1357, 1576, 1717
52.	x x 3 x 5 x x x x x 11 x x x	2	16, 602
53.	x x 3 x 5 x x x x x x 12 x x	1	323
54.	x x 3 x x x 7 x 9 x x x x x	1	2009
55.	x x 3 x x x x 8 9 x x x x x	1	82
56.	x x 3 x x x x 8 x 10 x x x x	2	1602, 1929
57.	x x 3 x x x x x 9 10 x x x x	5	307, 315, 564, 1064, 1595
58.	x x 3 x x x x x 9 x 11 x x x	1	1352
59.	x x 3 x x x x x 9 x x 12 x x	2	708, 1756
60.	x x 3 x x x x x x 10 11 x x x	6	387, 454, 531, 594, 609, 1477
61.	x x 3 x x x x x x x 11 12 x x	4	623, 658, 1054, 1502
62.	x x x 4 5 x x x x 10 x x x x	1	681
63.	x x x 4 x x x 8 9 x x x x x	1	180

No.	Pattern	Occur- rences	Item Serial Numbers
64.	x x x 4 x x x x x 11 12 x x	1	430
65.	x x x x 5 6 x 8 x x x x x	1	1470
66.	x x x x 5 6 x x x 10 x x x x	1	186
67.	x x x x 5 6 x x x x x 12 x x	1	1124
68.	x x x x 5 x 7 x 9 x x x x x	1	1118
69.	x x x x 5 x 7 x x 10 x x x x	1	324
70.	x x x x 5 x 7 x x x x 12 x x	2	334, 1900
71.	x x x x 5 x x 8 9 x x x x x	6	857, 870, 1193, 1744, 1803, 1865
72.	x x x x 5 x x 8 x 10 x x x x	12	19, 63, 139, 238, 466, 485, 538, 584, 848, 1303, 1361, 1853
73.	x x x x 5 x x 8 x x 11 x x x	7	116, 234, 734, 1051, 1194, 1446, 1829
74.	x x x x 5 x x 8 x x x 12 x x	5	542, 716, 1422, 1430, 1689
75.	x x x x 5 x x 8 x x x x 13 x	1	1781
76.	x x x x 5 x x 8 x x x x 14	4	322, 1333, 1589, 1710
77.	x x x x 5 x x x 9 10 x x x x	17	14, 239, 255, 440, 480, 504, 891, 958, 1088, 1209, 1271, 1604, 1631, 1644, 1700, 1734, 1766
78.	x x x x 5 x x x 9 x 11 x x x	4	936, 1036, 1295, 2038
79.	x x x x 5 x x x 9 x x 12 x x	3	540, 714, 1772
80.	x x x x 5 x x x x 10 11 x x x	18	253, 652, 670, 819, 864, 976, 1012, 1145, 1173, 1277, 1552, 1608, 1612, 1685, 1720, 1763, 1831, 1875
81.	x x x x 5 x x x x 10 x 12 x x	6	688, 724, 1149, 1160, 1483, 1632
82.	x x x x 5 x x x x 10 x x x 14	1	999
83.	x x x x 5 x x x x x 11 12 x x	12	733, 739, 812, 882, 950, 1062, 1228, 1234, 1369, 1620, 1903, 1914
84.	x x x x 5 x x x x x 11 x 13 x	1	99
85.	x x x x x 6 x x 9 10 x x x x	1	587
86.	x x x x x 6 x x x 10 11 x x x	1	280
87.	x x x x x x 7 x x 10 11 x x x	1	1058

No.	Pattern	Occur- rences	Item Serial Numbers
88.	x x x x x x 7 x x x 11 12 x x	2	1068, 1433
89.	x x x x x x x 8 9 10 x x x x	17	7, 67, 282, 360, 597, 705, 764, 772, 777, 1291, 1306, 1485, 1654, 1828, 1872, 1940, 1973,
90.	x x x x x x x 8 9 x x 12 x x	1	1881
91.	x x x x x x x 8 x 10 11 x x x	13	240, 366, 850, 943, 1423, 1445, 1447, 1512, 1630, 1646, 1778, 1928, 1965
92.	x x x x x x x 8 x 10 x 12 x x	8	179, 386, 662, 663, 817, 1098, 1684, 1814
93.	x x x x x x x 8 x 10 x x 13 x	1	8
94.	x x x x x x x 8 x x 11 12 x x	4	135, 242, 917, 1148
95.	x x x x x x x x 9 10 11 x x x	8	281, 284, 372, 593, 651, 981, 1499, 1728
96.	x x x x x x x x 9 10 x 12 x x	11	198, 206, 286, 291, 402, 947, 1113, 1186, 1391, 1394, 1818
97.	x x x x x x x x 9 10 x x 13 x	1	278
98.	x x x x x x x x 9 x 11 12 x x	9	450, 521, 751, 1239, 1648, 1662, 1784, 1843, 1845
99.	x x x x x x x x x 10 11 12 x x	35	40, 57, 95, 228, 247, 288, 371, 501, 519, 568, 580, 653, 659, 668, 682, 927, 972, 977, 1069, 1102, 1117, 1126, 1404, 1439, 1484, 1508, 1513, 1560, 1622, 1637, 1643, 1645, 1659, 1788, 2035
100.	x x x x x x x x x 10 11 x 13 x	1	987
Total Number of Items			406

List 13.

Sets of 2 Occurrences

Maximum Number of Sets of this Type: 91
 Number of Sets of this Type Occurring: 49

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 2 x x x x x x x x x x x x	5	484, 569, 661, 665, 1796
2.	1 x 3 x x x x x x x x x x x	3	65, 992, 1615
3.	1 x x x 5 x x x x x x x x x	25	145, 181, 231, 301, 329, 340, 474, 771, 774, 787, 889, 960, 963, 1039, 1152, 1237, 1262, 1263, 1274, 1319, 1486, 1735, 1877, 1907, 2037
4.	1 x x x x x 7 x x x x x x x	2	1789, 1860
5.	1 x x x x x x 8 x x x x x x	6	114, 469, 785, 1011, 1395, 1935
6.	1 x x x x x x x 9 x x x x x	7	209, 279, 687, 971, 1307, 1406, 1937
7.	1 x x x x x x x x 10 x x x x	21	219, 274, 356, 416, 452, 453, 491, 507, 831, 922, 973, 1285, 1315, 1480, 1481, 1501, 1505, 1509, 1616, 2017, 2029
8.	1 x x x x x x x x x 11 x x x	9	487, 610, 789, 796, 805, 837, 1326, 1495, 1844,
9.	1 x x x x x x x x x x 12 x x	4	993, 996, 1598, 1742
10.	1 x x x x x x x x x x x 13 x	1	2030
11.	x 2 3 x x x x x x x x x x	1	115
12.	x 2 x x 5 x x x x x x x x x	3	196, 1358, 1455
13.	x 2 x x x x 7 x x x x x x x	1	588
14.	x 2 x x x x x 8 x x x x x x	2	1669, 1752
15.	x 2 x x x x x x 9 x x x x x	1	1366
16.	x 2 x x x x x x x 10 x x x x	6	349, 1520, 1523, 1801, 1897, 1912
17.	x 2 x x x x x x x x 11 x x x	4	838, 1188, 1429, 1737
18.	x 2 x x x x x x x x x 12 x x	1	1939
19.	x x 3 x 5 x x x x x x x x x	15	66, 87, 173, 375, 448, 476, 710, 871, 887, 924, 1265, 1276, 1323, 1415, 1467
20.	x x 3 x x x 7 x x x x x x x	1	1349
21.	x x 3 x x x x 8 x x x x x x	2	264, 990
22.	x x 3 x x x x x 9 x x x x x	2	154, 1109
23.	x x 3 x x x x x x 10 x x x x	8	78, 342, 370, 532, 660,

No.	Pattern	Occur- rences	Item Serial Numbers
			1157, 1251, 1681
24.	x x 3 x x x x x x x 11 x x x	3	102, 1010, 1978
25.	x x 3 x x x x x x x x 12 x x	2	573, 1830
26.	x x x x 5 x 7 x x x x x x x	6	55, 100, 133, 929, 1065, 1466
27.	x x x x 5 x x 8 x x x x x x	28	111, 112, 343, 460, 512, 567, 655, 709, 740, 954, 1050, 1077, 1106, 1184, 1246, 1259, 1316, 1347, 1365, 1367, 1468, 1496, 1532, 1557, 1695, 1741, 1825, 1916
28.	x x x x 5 x x x 9 x x x x x	14	25, 80, 107, 164, 503, 749, 765, 926, 1049, 1170, 1736, 1776, 1791, 1899
29.	x x x x 5 x x x x 10 x x x x	38	30, 32, 83, 93, 151, 244, 254, 312, 353, 398, 457, 490, 595, 630, 727, 736, 778, 804, 928, 982, 1013, 1074, 1255, 1266, 1267, 1329, 1448, 1596, 1649, 1668, 1687, 1697, 1731, 1804, 1821, 1822, 1834, 2036
30.	x x x x 5 x x x x x 11 x x x	28	35, 218, 330, 533, 581, 636, 722, 726, 747, 854, 913, 919, 944, 1001, 1086, 1101, 1197, 1232, 1618, 1638, 1652, 1672, 1677, 1690, 1696, 1852, 1983, 1961
31.	x x x x 5 x x x x x x 12 x x	11	4, 165, 571, 624, 625, 715, 744, 824, 1132, 1222, 1740
32.	x x x x 5 x x x x x .x x 13 x	1	91
33.	x x x x 5 x x x x x x x 14	1	499
34.	x x x x x x 7 x x 10 x x x x	3	378, 578, 1090
35.	x x x x x x 7 x x x 11 x x x	1	1487
36.	x x x x x x x 8 9 x x x x x	12	142, 159, 599, 717, 1137,

No.	Pattern	Occur- rences	Item Serial Numbers
			1154, 1273, 1459, 1544, 1942, 1952, 1969,
37.	x x x x x x x 8 x 10 x x x x	23	59, 160, 224, 259, 269, 270, 292, 427, 589, 685, 951, 1026, 1093, 1119, 1244, 1362, 1657, 1780, 1783, 1805, 1823, 1889, 1941
38.	x x x x x x x 8 x x 11 x x x	5	590, 1083, 1311, 1396, 1931
39.	x x x x x x x 8 x x x 12 x x	6	797, 912, 968, 1023, 1363, 1452
40.	x x x x x x x 8 x x x x 13 x	1	1478
41.	x x x x x x x 8 x x x x x 14	1	1533
42.	x x x x x x x x 9 10 x x x x	32	156, 261, 268, 293, 369, 522, 582, 678, 707, 746, 786, 832, 1091, 1097, 1114, 1127, 1133, 1156, 1279, 1378, 1428, 1434, 1498, 1526, 1617, 1650, 1679, 1797, 1806, 1835, 1902, 2025
43.	x x x x x x x x 9 x 11 x x x	7	260, 265, 949, 991, 1407, 1647, 1977
44.	x x x x x x x x 9 x x 12 x x	9	713, 890, 899, 1112, 1130, 1208, 1289, 1458, 1890
45.	x x x x x x x x 9 x x x x 14	1	1275
46.	x x x x x x x x x 10 11 x x x	44	166, 204, 256, 348, 409, 508, 518, 527, 528, 535, 643, 671, 672, 781, 853, 898, 914, 938, 964, 974, 984, 1079, 1110, 1248, 1309, 1310, 1382, 1438, 1441, 1443, 1500, 1503, 1611, 1641, 1642, 1660, 1666, 1712, 1761, 1810, 1906, 1908, 1910, 1938,
47.	x x x x x x x x x 10 x 12 x x	25	248, 262, 405, 426, 517, 551, 626, 776, 969, 980,

No.	Pattern	Occur- rences	Item Serial Numbers
			988, 1252, 1312, 1416, 1449, 1461, 1515, 1575, 1579, 1640, 1683, 1698, 1808, 1927, 1972
48.	x x x x x x x x 10 x x 13 x	1	304
49.	x x x x x x x x x x 11 12 x x	7	41, 252, 285, 411, 621, 1304, 1636
Total Number of Items			440

List 14.

Sets of 1 Occurrence

Maximum Number of Sets of this Type: 14

Number of Sets of this Type Occurring: 9

No.	Pattern	Occur- rences	Item Serial Numbers
1.	1 x x x x x x x x x x x x	2	61, 1527
2.	x x x 4 x x x x x x x x x x	2	143, 1321
3.	x x x x 5 x x x x x x x x x x	7	319, 404, 780, 1143, 1932, 2039, 2042
4.	x x x x x 6 x x x x x x x x	1	414
5.	x x x x x x x 8 x x x x x x	3	1204, 1537, 1926
6.	x x x x x x x x 9 x x x x x	2	1521, 1893
7.	x x x x x x x x x 10 x x x x	14	15, 24, 250, 373, 419, 506, 549, 666, 684, 1405, 1811, 1855, 1989, 2043
8.	x x x x x x x x x x 11 x x x	2	482, 883
9.	x x x x x x x x x x x 12 x x	3	203, 289, 1986
Total Number of Items			36

T A B L E T H R E E

The Co-occurrences of Language Groups

1. Number of Co-occurrences of Language Groups

Language															
Group	With	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Indic	-	577	304	59	714	78	230	578	523	698	591	518	198	119	
2. Iranian	577	-	264	52	501	69	189	415	403	497	421	379	167	97	
3. Armenian	304	264	-	41	365	54	138	305	280	348	297	247	112	80	
4. *Phryg/Dac	59	52	41	-	68	26	28	49	55	64	56	50	23	11	
5. Hellenic	714	501	365	68	-	90	266	675	601	809	689	591	209	130	
6. Illyrian	78	69	54	26	90	-	36	77	85	92	78	75	35	26	
7. Albanian	230	189	138	28	266	36	-	230	208	259	223	216	91	49	
8. Italic	578	415	305	49	675	77	230	-	546	730	564	525	185	120	
9. Celtic	523	403	280	55	601	85	208	546	-	703	554	509	171	103	
10. Germanic	698	497	348	64	809	92	259	730	703	-	828	722	214	120	
11. Baltic	591	421	297	56	689	78	223	564	554	828	-	715	181	92	
12. Slavonic	518	379	247	50	591	75	216	525	509	722	715	-	165	99	
13. Tocharian	198	167	112	23	209	35	91	185	171	214	181	165	-	62	
14. Hittite	119	97	80	11	130	26	49	120	103	120	92	99	62	-	

2. Number of Co-occurrences of Language Groups (expressed in %)

Language															
Group	With	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Indic	-	57	30	6	71	8	23	57	52	69	59	51	20	12	
2. Iranian	85	-	39	8	73	10	28	61	59	73	62	56	24	14	
3. Armenian	64	56	-	9	77	11	29	65	59	74	63	52	24	17	
4. *Phryg/Dac	73	64	51	-	84	32	35	60	68	79	69	62	28	14	
5. Hellenic	58	41	30	6	-	7	22	55	49	66	56	48	17	11	
6. Illyrian	67	59	47	22	78	-	31	66	73	79	67	65	30	22	
7. Albanian	71	58	42	9	82	11	-	71	64	80	69	66	28	15	
8. Italic	60	43	32	5	70	8	24	-	57	76	59	55	19	13	
9. Celtic	57	44	30	6	65	9	23	59	-	76	60	55	19	11	
10. Germanic	51	36	25	5	59	7	19	53	51	-	60	52	16	9	
11. Baltic	54	38	27	5	63	7	20	51	50	75	-	65	16	8	
12. Slavonic	55	40	26	5	63	8	23	56	54	77	76	-	18	11	
13. Tocharian	76	64	43	9	80	13	35	71	66	82	70	63	-	24	
14. Hittite	77	63	52	7	84	17	32	77	66	77	59	64	40	-	

Note: *Phryg/Dac = Phrygian and Dacian

3. Number of Co-occurrences of Language Groups (expressed in terms of the correlation to '1' - .x : 1)

Language

Group	With	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Indic	-														
2. Iranian	.709														
3. Armenian	.473	473													
4. *Phryg/Dac.	.393	359	297												
5. Hellenic	.643	570	534	447											
6. Illyrian	.375	348	290	273	424										
7. Albanian	.468	429	358	216	517	211									
8. Italic	.588	521	482	328	625	372	474								
9. Celtic	.544	514	449	369	570	413	433	581							
10. Germanic	.600	545	495	418	621	430	493	646	637						
11. Baltic	.562	500	450	371	593	372	445	551	553	578					
12. Slavonic	.532	479	393	335	553	363	447	553	547	646	706				
13. Tocharian	.479	444	334	186	487	218	315	452	422	489	431	405			
14. Hittite	.443	384	343	103	472	196	233	450	388	431	339	372	319		